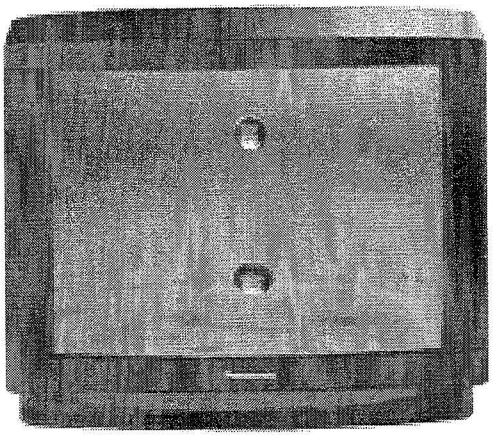
ORDER NO. SM – 97089

Service Manual



Colour Television

TX–29AD3P
TX–25AD2P
EURO–2 Chassis

SPECIFICATIONS

(Information in brackets {} refer to TX–25AD2P)

Power Source : 220–240V AC 50Hz

Power Consumption : 172W {159W}

Aerial Impedance : 75Ω unbalanced, Coaxial Type

Receiving System :
PAL H, B, G, D, K, PAL 60
SECAM B, G, D, K
M.NTSC,NTSC (AV only)

Receiving Channels :
VHF E2 – E12
VHF H1 – H2 (ITALY)
VHF A – H (ITALY)
VHF R1 – R2
VHF R3 – R5
VHF R6 – R12
UHF E21 – E69
CATV (S01 – S05)
CATV S1 – S10 (M1 – M10)
CATV S11 – S20 (U1 – U10)
CATV S21 – S41 (HYPERBAND)

Intermediate Frequency :

Video	38.9 MHz, 34MHz
Sound	32.9MHz, 33.4 MHz 33.16 MHz, 32.4 MHz, 40.4MHz
Colour	34.47 MHz, 34.5 MHz, 34.65 MHz

Video / Audio Terminals :

AUDIO MONITOR OUT	Audio(RCA x 2) 500mV rms,1kΩ
AV1 IN	Video (21 pin) 1V p–p 75Ω Audio (21 pin) 500mV rms, 10kΩ RGB (21 pin)
AV1 OUT	Video (21 pin) 1V p–p 75Ω Audio (21 pin) 500mV rms, 1kΩ
AV2 IN	Video (21 pin) 1V p–p 75Ω Audio (21 pin) 500mV rms, 10kΩ S–Video IN (21 pin) Y : 1V p–p 75Ω C : 0.3V p–p 75Ω
AV2 OUT	Video (21 pin) 1V p–p 75Ω Audio (21 pin) 500mV rms, 1kΩ Selectable output (21 pin)
AV3 IN	S–Video IN (4–pin) Y : 1V p–p 75Ω C : 0.3V p–p 75Ω Audio (RCA x 2) 500mV rms, 10kΩ Video (RCA x 1) 1V p–p 75Ω

High Voltage : 31.5kV ±1kV at zero beam current

Picture Tube : 68cm {59cm}
measured diagonally.

Audio Output :

Internal Speaker	2 x 20W (Music Power) 8Ω Impedance
Headphones	8Ω Impedance

Accessories supplied : Remote Control
2 x UM3 Batteries

Dimensions :

Height :	570mm	{510mm}
Width :	698mm	{625mm}
Depth :	483mm	{468mm}

Net Weight 39kg {34kg}

Specifications are subject to change without notice.
Weight and dimensions shown are approximate.

Panasonic

CONTENTS

SAFETY PRECAUTIONS .....
SERVICE HINTS .....
SERVICE MODE .....
SELF CHECK .....
ADJUSTMENT PROCEDURE .....
ALIGNMENT SETTINGS .....
WAVEFORM PATTERN TABLE .....
BLOCK DIAGRAMS .....
PARTS LOCATION .....
REPLACEMENT PARTS LIST .....
P.C.B. VIEWS .....
SCHEMATIC DIAGRAMS .....

Safety Precautions

General Guide Lines

1. It is advisable to insert an isolation transformer in the AC supply before servicing a hot chassis.
2. When servicing, observe the original lead dress in the high voltage circuits. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
3. After servicing, see that all the protective devices such as insulation barriers, insulation papers, shields and isolation R-C combinations are correctly installed.
4. When the receiver is not being used for a long period of time, unplug the power cord from the AC outlet.
5. Potentials as high as 32.5kV are present when this receiver is in operation. Operation of the receiver without the rear cover involves the danger of a shock hazard from the receiver power supply. Servicing should not be attempted by anyone who is not familiar with the precautions necessary when working on high voltage equipment. Always discharge the anode of the picture to the chassis before handling the tube.
6. After servicing make the following leakage current checks to prevent the customer from being exposed to shock hazards.

Leakage Current Cold Check

1. Unplug the AC cord and connect a jumper between the two prongs of the plug.
2. Turn on the receiver's power switch.
3. Measure the resistance value with an ohmmeter, between the jumpered AC plug and each exposed metallic cabinet part on the receiver, such as screw heads, aerials , connectors, control shafts etc. When the exposed metallic part has a return path to the chassis the reading should be between 4M ohm and 20M ohm. When the exposed metal does not have a return path to the chassis the reading must be infinite.

Leakage Current Hot Check

1. Plug the AC cord directly into the AC outlet. Do not use an isolation transformer for this check.
2. Connect a 2k ohm 10W resistor in series with an exposed metallic part on the receiver and an earth such as a water pipe.
3. Use an AC voltmeter with high impedance to measure the potential across the resistor.
4. Check each exposed Metallic part and check the voltage at each point.
5. Reverse the AC plug at the outlet and repeat each of the above measurements.
6. The potential at any point should not exceed 1.4 Vrms. In case a measurement is outside the limits specified, there is a possibility of a shock hazard, and the receiver should be repaired and rechecked before it is returned to the customer.

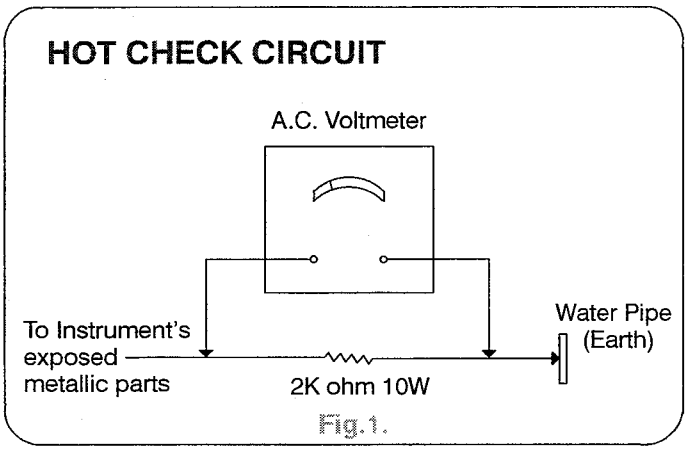


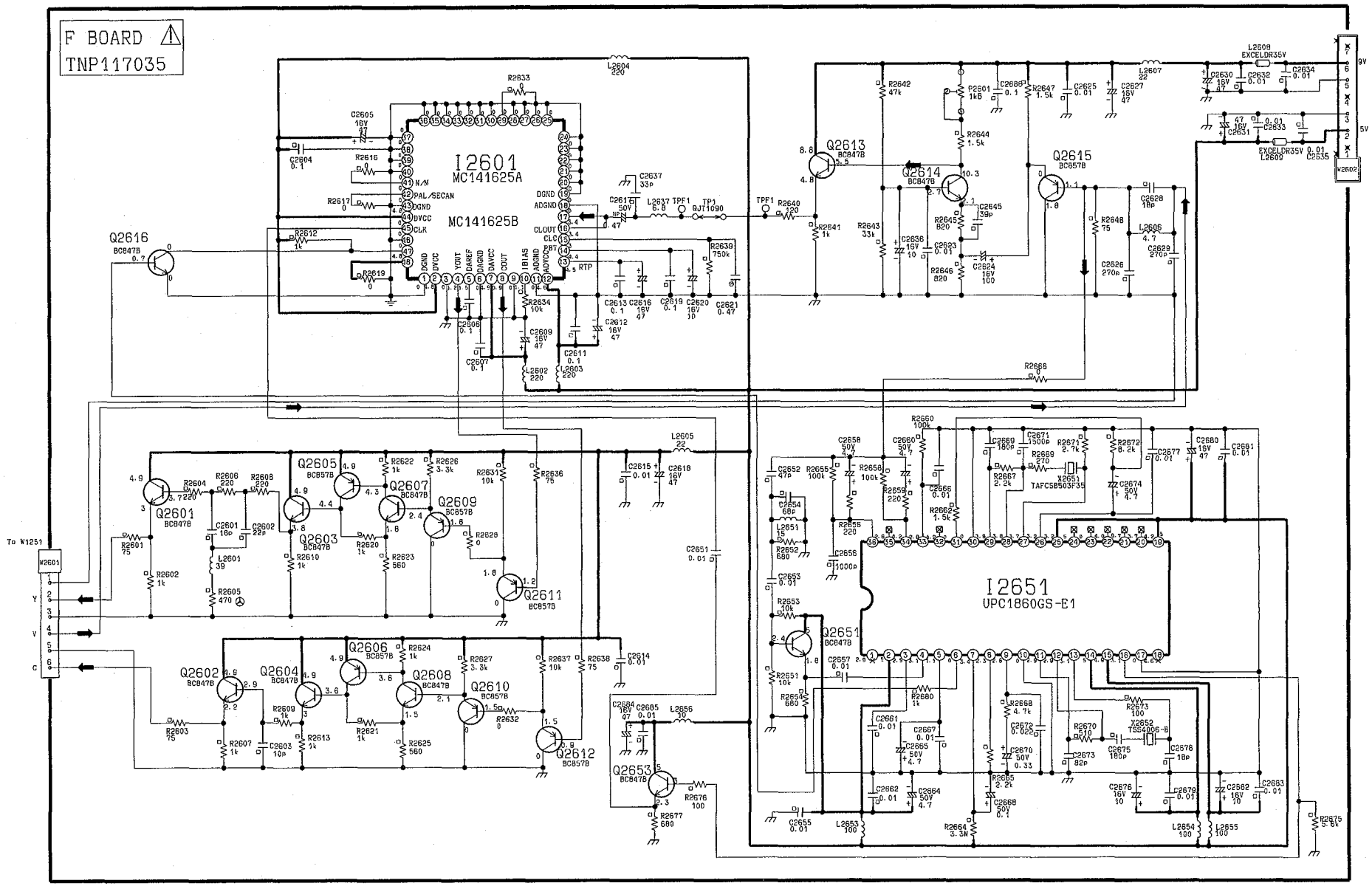
Fig.1.

X-Radiation Warning

1. The potential sources of X-Radiation in TV sets are the high voltage section and the picture tube.
2. When using a picture tube test jig for service ensure that the jig is capable of handling 32.5kV without causing X-Radiation.

NOTE : It is important to use an accurate periodically calibrated high voltage meter

1. Set the brightness to minimum.
2. Measure the high voltage. The meter should indicate 31.5kV ±1kV at zero beam current if the meter indication is out of tolerance, immediate service and correction is required to prevent the possibility of premature component failure.
3. To prevent an X-Radiation possibility, it is essential to use the specified tube.


F BOARD
TNP117035
I2601
MC141625A
MC141625B
I2651
UPC1860GS-E1
Q2601
Q2602
Q2603
Q2604
Q2605
Q2606
Q2607
Q2608
Q2609
Q2610
Q2611
Q2612
Q2613
Q2614
Q2615
Q2616
Q2651
Q2653
To W1251
W2601
W2602
9V
5V

SCHEMATIC DIAGRAM FOR MODELS
TX-29AD3P
TX-25AD2P
(EURO-2S CHASSIS)

IMPORTANT SAFETY NOTICE

Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

Notes

1. RESISTOR
   All resistors are carbon ¼W resistor, unless marked.
   Unit of resistance is OHM (Ω) (K=1,000, M=1,000,000).
2. CAPACITOR
   All capacitors are ceramic 50V capacitors, unless marked, the unit of capacitance is μF unless otherwise stated.
3. COIL
   Unit of inductance is μH, unless otherwise stated.
4. TEST POINT

   Test Point Position
5. EARTH SYMBOL

   Chassis Earth (cold)

   Line Earth (Hot)
6. VOLTAGE MEASUREMENT
   Voltage is measured by a DC voltmeter.
   Measurement conditions are as follows:

Power source	AC 220–240V, 50Hz
Receiving Signal	Colour Bar signal (RF)
All customer controls	Maximum position

7.

   Indicates the Video signal path

   Indicates the Audio signal path

   Indicates the Vertical/Horizontal signal path
8. This schematic diagram is the latest at the time of printing and is subject to change without notice.

Precautions

a. Do not touch the hot part, or the hot and cold parts at the same time, as you are liable to a shock hazard.

b. Do not short-circuit the hot and cold circuits as electrical components may be damaged.

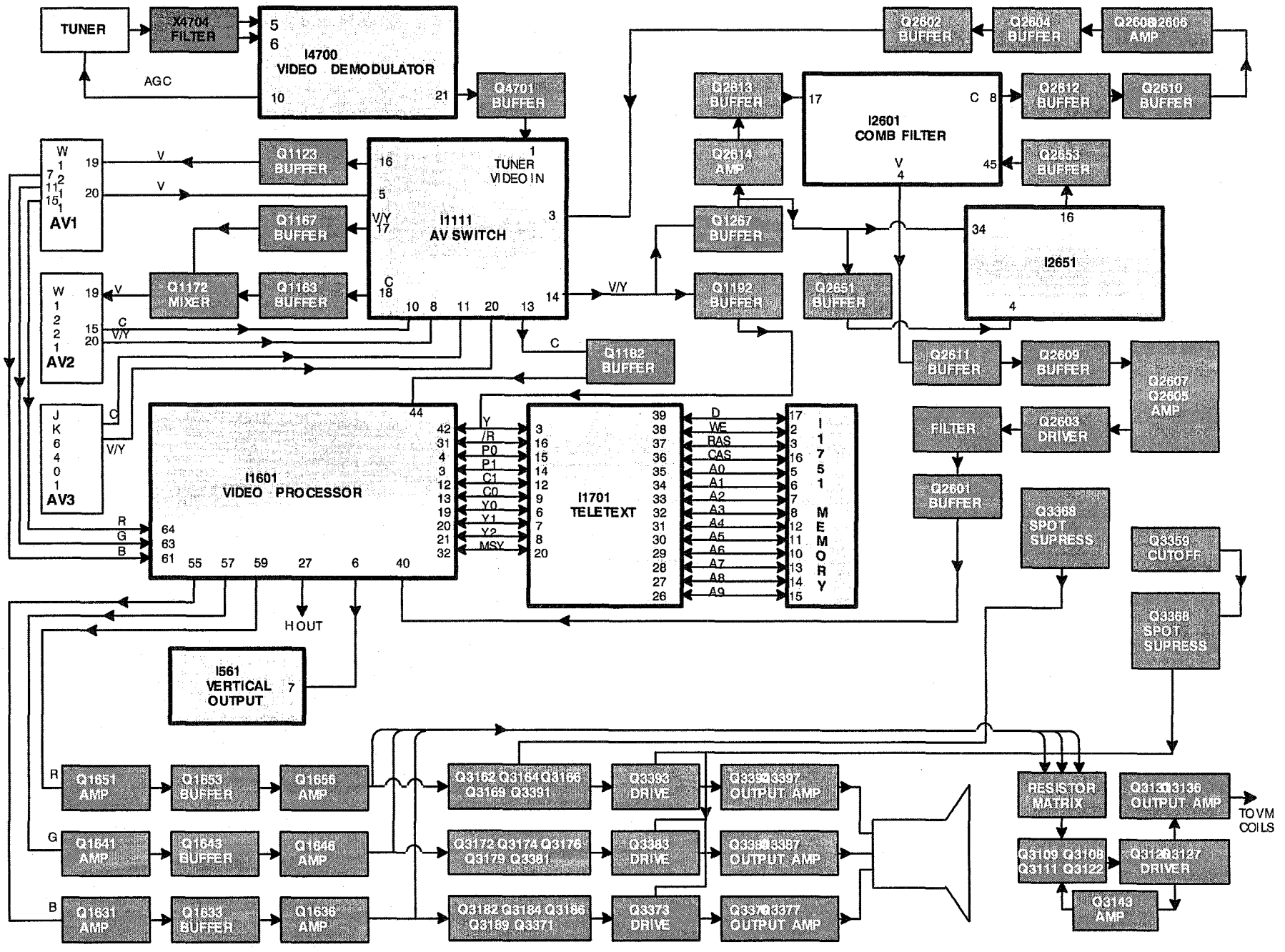
c. Do not connect an instrument, such as an oscilloscope, to the hot and cold circuits simultaneously, as this may cause fuse failure. Connect the earth of the instruments to the earth connection of the circuit being measured.

d. Make sure to disconnect the power plug before removing the chassis.

Remarks

1. The Power Circuit contains a circuit area which uses a separate power supply to isolate the earth connection. The circuit is defined by HOT and COLD indications in the schematic diagram. All circuits, except the Power Circuit, are COLD.

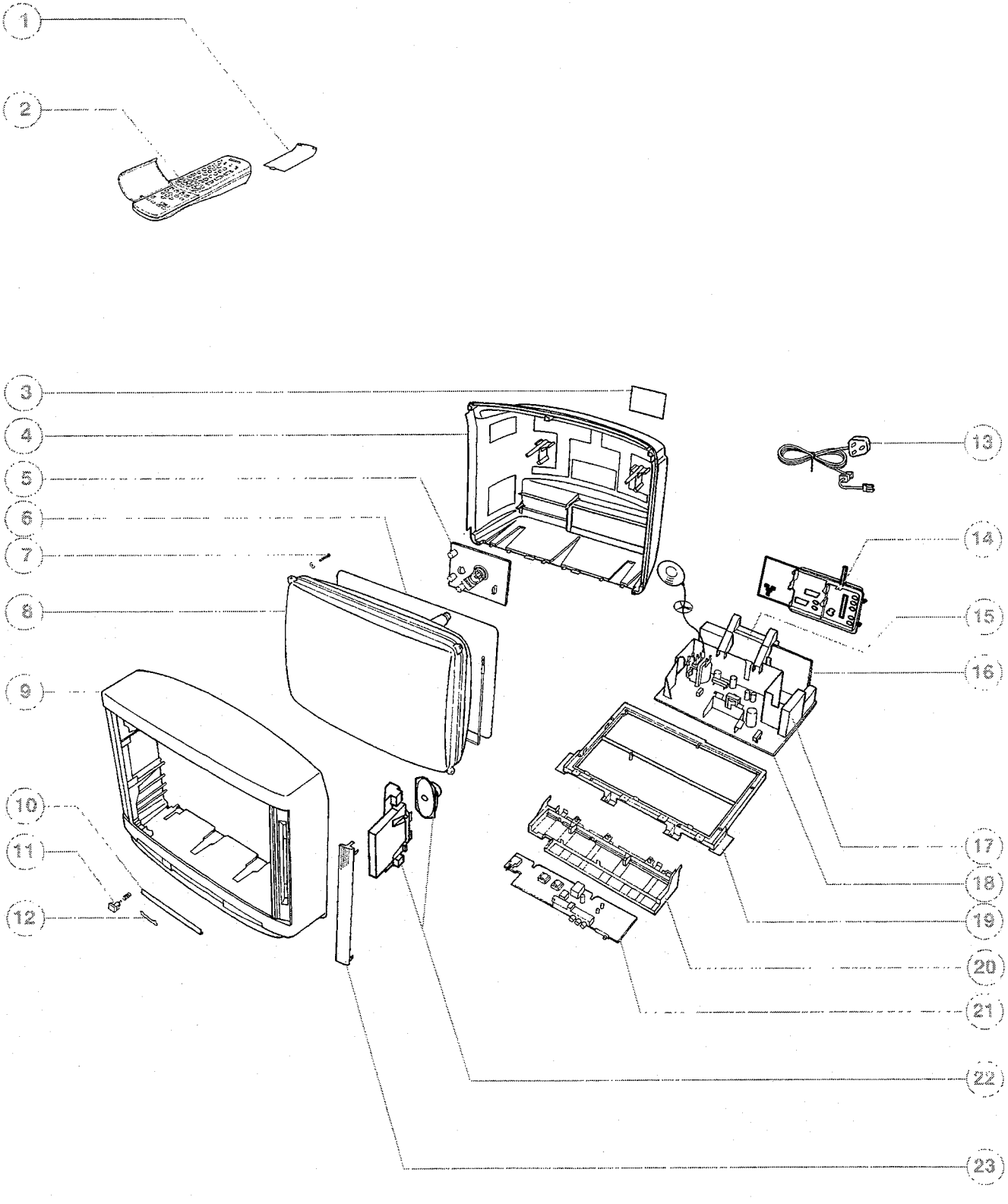
VIDEO BLOCK DIAGRAM



PARTS LOCATION

NOTE :

The numbers on the exploded view below refer to the miscellaneous section of the Replacement Parts List.



REPLACEMENT PARTS LIST

Important Safety Notice
Components identified by ⚠ mark have special characteristics important for safety.
When replacing any of these components, use only manufacturer's specified parts.

COMMON PARTS FOR MODELS TX – 29AD3P AND TX – 25AD2P

Ref No.	Part No.	Description	
		MISCELLANEOUS COMPONENTS	
1)	UR51EC780	BATTERY COVER (REMOTE)	
2)	EUR51920	REMOTE CONTROL	
3)	**********	REFER TO DIFFERENCE LIST	
4)	**********	REFER TO DIFFERENCE LIST	
5)	**********	REFER TO DIFFERENCE LIST	
6)	**********	REFER TO DIFFERENCE LIST	
7)	**********	REFER TO DIFFERENCE LIST	
8)	**********	REFER TO DIFFERENCE LIST	
9)	**********	REFER TO DIFFERENCE LIST	
10)	TKP8E1141	DOOR LID	
11)	TBX8E032	POWER BUTTON	
12)	**********	REFER TO DIFFERENCE LIST	
13)	TSX8E0020	POWER CORD	⚠
14)	TKP8E1145	AV PANEL	
15)	TNP117035AB	F P.C.B.	⚠
16)	**********	REFER TO DIFFERENCE LIST	
17)	TNP117039AC	B P.C.B	⚠
18)	**********	REFER TO DIFFERENCE LIST	
19)	TMX8E012	CHASSIS FRAME	
20)	TMW8E016-1	CONTROL BLOCK FRAME	
21)	TNP8EM012AA	M P.C.B.	⚠
22)	EAGG1218E2	SPEAKER	
23)	**********	REFER TO DIFFERENCE LIST	
	TEK6940	LID CATCHER	
	TKP8E1142	PANEL RIGHT	
	TKP8E1143	PANEL LEFT	
	TMW8E017	L.E.D. HOLDER	
	31221212478	FIX CLIP	
	ENV578F5G3J	TUNER	⚠
	TBM8E1532-2	PRESET PANEL	
	UM-3DJ-2P	BATTERY SET	
	ERC12GK825	SOLID 0.5W 10% 8MΩ	
		INTEGRATED CIRCUITS	
I466	LA4282	AUDIO OUTPUT	
I561	TDA8175-3	VERTICAL OUTPUT	
I611	TDA4605-3	SWITCHABLE POWER SUPPLY	
I646	L78M09MRB	9V REGULATOR	
I661	LM317T	12V REGULATOR	
I676	TL431ACLPM	REGULATOR	
I1011	TEA6420	AUDIO SWITCH	
I1111	TEA6415C	VIDEO SWITCH	
IC1202	MX27C1A-A13		
I1301	MSP3410BPPF7	AUDIO PROCESSOR	
I1351	AN78L08TA	8V REGULATOR	
I1601	VDP3108APPA1	VIDEO PROCESSOR	
I1701	TPU3040-20	TEXT PROCESSOR	
I1751	81C1000A-70P	DRAM	
I1801	CCU3000I-07	CENTRAL CONTROL UNIT	
I1802	MN1280R	RESET	
I1981	MN1280R	RESET	
I2601	MC141625A	FILTER	
I2651	UPC1860GS-E1	DELAY	
I4700	LA7577N	V.I.F.	
I4701	AN78N12	12V REGULATOR	
I6101	AN78L05TA	5V REGULATOR	

Ref No.	Part No.	Description
I6301	RPM-637CBRS1	LED RECEIVER

LINKS

BC1	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
BC2	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
BC4	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
BC5	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
B11	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
B12	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
B15	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
B16	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
B17	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
B18	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
B19	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω

CAPACITORS

C200	ECBT1E103ZF5	CERAMIC	25V	10nF
C203	ECA1CM221GB	ELECT	16V	220μF
C204	ECQB1H104J	FILM	50V	100nF
C205	ECBT1H102KB3	CERAMIC	50V	1nF
C206	222236516334	FILM	160V	330nF
C211	ECEA1HFQ101	ELECT	50V	100μF
C212	ECQB1H104J	FILM	50V	100nF
C226	ECQB1H104J	FILM	50V	100nF
C228	ECKC1H102J	CERAMIC	50V	1000pF
C461	ECKC1H821J	CERAMIC	50V	820pF
C462	ECA1EM101GB	ELECT	25V	1μF
C463	ECA1EM471GB	ELECT	25V	470μF
C464	ECQM1H104J	FILM	50V	100nF
C465	ECA1CM470GB	ELECT	16V	47μF
C466	ECEA1HU222	ELECT	50V	2200μF
C467	ECQB1H103J	FILM	50V	10nF
C468	ECBT1C222MR3	CERAMIC	16V	2200μF
C470	222236516224	FILM	160V	220nF
C471	ECA1HM010GB	ELECT	50V	1μF
C472	ECA1HM101GB	ELECT	50V	100μF
C473	ECEA1EGE222	ELECT	25V	2200μF
C476	ECA1HM4R7GB	ELECT	50V	4.7μF
C477	ECA1HM2R2GB	ELECT	50V	2.2μF
C479	222236576104	FILM	760V	100nF
C480	222236516224	FILM	160V	220nF
C481	ECA1HM010GB	ELECT	50V	1μF
C482	ECA1HM101GB	ELECT	50V	100μF
C483	ECEA1EGE222	ELECT	25V	2200μF
C486	ECA1HM4R7GB	ELECT	50V	4.7μF
C487	ECA1HM2R2GB	ELECT	50V	2.2μF
C489	222236576104	FILM	760V	100nF
C492	ECA1VM4R7GB	ELECT	35V	4.7μF
C495	ECA1EM101GB	ELECT	25V	1μF
C496	ECA1CM100GB	ELECT	16V	10μF
C501	ECKC1H103JB	CERAMIC	50V	10nF
C511	ECQM1H393J	FILM	50V	0.039μF
C521	ECEA1HU101	ELECT	50V	100μF
C524	222236516105	FILM	160V	1μF
C525	ECKC1H271J	CERAMIC	50V	270pF
C527	ECQM2683JZ	FILM	250V	68nF
C531	ECQM2564KZ	FILM	250V	560nF

Ref No.	Part No.	Description			
C534	ECWH12H562J	CERAMIC	1250V	5600pF	⚠
C536	ECWH12H103J	FILM	1250V	10nF	⚠
C537	ECQF4273JZH	FILM	400V	27nF	
C543	ECA2VM2R2B	ELECT	350V	2R2μF	
C544	ECKC3D152J	CERAMIC	2KV	1.5nF	⚠
C547	ECKC2H101J	CERAMIC	500V	100pF	⚠
C548	ECEA2EU220	ELECT	250V	22μF	
C549	ECEA2AU2R2	ELECT	100V	2.2μF	
C557	ECKC2H101J	CERAMIC	500V	100pF	⚠
C558	ECA1VM102GB	ELECT	35V	1μF	
C561	ECEA1VU222	ELECT	35V	2200μF	
C562	222236576104	FILM	760V	100nF	
C563	ECA1VM471GB	ELECT	35V	470μF	
C564	ECQB1H473K	FILM	50V	47nF	
C565	ECKC2H151J	CERAMIC	500V	150pF	⚠
C567	ECQB1H223K	FILM	50V	22nF	
C568	222236516224	FILM	160V	220nF	
C574	ECEA1VU332	ELECT	35V	3300μF	
C576	ECQM1H684J	FILM	50V	680nF	
C577	222236516105	FILM	160V	1μF	
C578	222236516154	FILM	160V	150nF	
C579	ECKC1H472J	CERAMIC	50V	4.7nF	
C583	ECQB1H333J	FILM	50V	33nF	
C591	ECA1HW4R7UE	ELECT	50V	4.7μF	
C592	ECA1CM330GB	ELECT	16V	33μF	
C593	ECKC1H103JB	CERAMIC	50V	10nF	
C594	ECKC1H103JB	CERAMIC	50V	10nF	
C595	ECQB1H102J	FILM	50V	1nF	
C596	ECQE2474KFW	FILM	200V	470nF	
C597	ECQB1H332K	FILM	50V	3.3nF	
C618	ECOS2GG181NG	ELECT	400V	180μF	⚠
C619	ECQE6104K	FILM	600V	100nF	⚠
C620	ECKC2H561J	CERAMIC	500V	560pF	⚠
C622	ECEA1HFS470	ELECT	50V	47μF	
C623	222236516224	FILM	160V	220nF	
C626	ECKC3D471JB	CERAMIC	2KV	470pF	⚠
C628	ECKC1H221J	CERAMIC	50V	220pF	
C629	ECQB1H153K	FILM	50V	15nF	
C631	ECQB1H472J	FILM	50V	4.7nF	
C632	ECQB1H104J	FILM	50V	100nF	
C634	ECEA1HGE010	ELECT	50V	1μF	
C635	ECKC3D331J	CERAMIC	2KV	330pF	⚠
C636	ECKC2H472J	CERAMIC	500V	4.7nF	⚠
C637	ECQB1H222J	FILM	50V	2200pF	
C638	ECQF6333JZH	FILM	600V	0.033μF	
C639	ECKWNA222MEC	CERAMIC		2.2nF	
C647	222236516334	FILM	160V	330nF	
C650	ECKC3A102J	CERAMIC	1KV	1nF	⚠
C651	ECOS2EA221AB	ELECT	250V	220μF	
C656	ECKC2H681J	CERAMIC	500V	680pF	⚠
C657	ECEA1HU471	ELECT	50V	470μF	
C661	ECKC2H821J	CERAMIC	500V	820pF	⚠
C662	ECA1VM222GE	ELECT	35V	2.2μF	
C666	222236516224	FILM	160V	220nF	
C667	ECA1CM471GB	ELECT	16V	470μF	
C671	ECKC2H681J	CERAMIC	500V	680pF	⚠
C672	ECA1VM222GE	ELECT	35V	2.2μF	
C677	ECA1CM471GB	ELECT	16V	470μF	
C681	ECEA1EGE101	ELECT	25V	100μF	
C682	ECKC2H331J	CERAMIC	500V	330pF	⚠
C687	ECEA1HGE102	ELECT	50V	1000μF	
C1001	ECA1CM470GB	ELECT	16V	47μF	
C1002	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1011	ECA1CM470GB	ELECT	16V	47μF	
C1012	ECUV1H473ZFX	S.M.CAP	50V	47nF	
C1013	ECA1CM470GB	ELECT	16V	47μF	
C1019	ECA1CM470GB	ELECT	16V	47μF	
C1020	ECA1CM470GB	ELECT	16V	47μF	
C1021	ECA1HMR47GB	ELECT	50V	0.47μF	
C1022	ECA1HMR47GB	ELECT	50V	0.47μF	
C1023	ECUV1H221JCX	S.M.CAP	50V	220pF	

Ref No.	Part No.	Description			
C1024	ECUV1H221JCX	S.M.CAP	50V	220pF	
C1031	ECEA1HNR47	ELECT	50V	0.47μF	
C1032	ECA1HMR47GB	ELECT	50V	0.47μF	
C1033	ECUV1H221JCX	S.M.CAP	50V	220pF	
C1034	ECUV1H221JCX	S.M.CAP	50V	220pF	
C1036	ECA1CM470GB	ELECT	16V	47μF	
C1038	ECA1CM470GB	ELECT	16V	47μF	
C1041	ECUV1H103KBX	S.M.CAP	50V	10nF	
C1042	ECUV1H103KBX	S.M.CAP	50V	10nF	
C1043	ECA1HMR47GB	ELECT	50V	0.47μF	
C1044	ECA1HMR47GB	ELECT	50V	0.47μF	
C1045	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
C1051	ECEA1HNR33	ELECT	50V	0.33μF	
C1052	ECEA1HNR33	ELECT	50V	0.33μF	
C1071	ECEA1CN470	ELECT	16V	47μF	
C1091	ECA1CM470GB	ELECT	16V	47μF	
C1101	ECA1HMR47GB	ELECT	50V	0.47μF	
C1111	ECA1HM470GB	ELECT	50V	47μF	
C1112	ECUV1H473ZFX	S.M.CAP	50V	47nF	
C1116	ECUV1H473ZFX	S.M.CAP	50V	47nF	
C1121	ECA1HMR47GB	ELECT	50V	0.47μF	
C1124	ECUV1H473ZFX	S.M.CAP	50V	47nF	
C1126	ECA1CM470GB	ELECT	16V	47μF	
C1151	ECUV1H102KBX	S.M.CAP	50V	1nF	
C1158	ECA1HMR47GB	ELECT	50V	0.47μF	
C1161	ECUV1H102KBX	S.M.CAP	50V	1nF	
C1178	ECUV1H473ZFX	S.M.CAP	50V	47nF	
C1179	ECA1CM470GB	ELECT	16V	47μF	
C1183	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1193	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1226	ECUV1H560JCX	S.M.CAP	50V	56pF	
C1231	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1241	ECUV1H472KBX	S.M.CAP	50V	4.7nF	
C1242	ECUV1H472KBX	S.M.CAP	50V	4.7nF	
C1263	ECUV1H102KBX	S.M.CAP	50V	1nF	
C1266	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1271	ECUV1H102KBX	S.M.CAP	50V	1nF	
C1273	ECA1HMR47GB	ELECT	50V	0.47μF	
C1282	ECA1HMR47GB	ELECT	50V	0.47μF	
C1284	ECA1HMR47GB	ELECT	50V	0.47μF	
C1301	ECA1CM100GB	ELECT	16V	10μF	
C1302	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1303	ECA1CM100GB	ELECT	16V	10μF	
C1304	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1306	ECA1HM101GB	ELECT	50V	100μF	
C1307	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1309	ECA1CM100GB	ELECT	16V	10μF	
C1310	ECA1CM100GB	ELECT	16V	10μF	
C1311	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1312	ECEA50Y3R3	ELECT	50V	3.3μF	
C1313	ECUV1H471JCX	S.M.CAP	50V	470pF	
C1314	ECUV1H471JCX	S.M.CAP	50V	470pF	
C1315	ECA1CM100GB	ELECT	16V	10μF	
C1316	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1321	ECUV1H010CCX	S.M.CAP	50V	1pF	
C1322	ECUV1H010CCX	S.M.CAP	50V	1pF	
C1326	ECQM1H334J	FILM	50V	330nF	
C1327	ECUV1H221JCX	S.M.CAP	50V	220pF	
C1331	ECUV1H391JCX	S.M.CAP	50V	390pF	
C1332	ECUV1H391JCX	S.M.CAP	50V	390pF	
C1346	ECUV1H221JCX	S.M.CAP	50V	220pF	
C1347	ECUV1H221JCX	S.M.CAP	50V	220pF	
C1351	ECA1CM470GB	ELECT	16V	47μF	
C1352	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1353	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1371	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
C1377	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1382	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1409	ECUV1H470JCX	S.M.CAP	50V	47pF	
C1411	ECUV1H070DCX	S.M.CAP	50V	7pF	
C1412	ECUV1H100DCX	S.M.CAP	50V	10pF	
C1413	ECUV1H220JCX	S.M.CAP	50V	22pF	

SERVICE MODE

The remote control is used for entering and storing adjustments, with the exception of cut–off adjustments which must always be done prior to service adjustment. Perform adjustments in accordance with screen display. The display on the screen also specifies the CCU variants as well as the approx. setting values.The adjustment sequence for the service mode is indicated below.

1. Set the Bass to maximum position, set the Treble to minimum position, press the F button followed by the Volume down on the customer controls at the front of the TV and at the same time press the Reveal button on the remote control, this will place the TV into the Service Mode.
2. Press the RED / GREEN buttons to step down / up through the functions.
3. Press the YELLOW / BLUE buttons to alter the function values.
4. Press the STORE button on the preset panel after each adjustment has been made to store the required values.
5. To exit the Service Mode press the Normalisation button.

NOTE: This TV also has the option of using a Memory Pack which enables you to copy the preset TV channels and analogue levels into the Memory Pack and then upload them onto another EURO–2 TV set.

Using the Memory Pack

TV to Memory Pack process

1. Plug the memory pack into the lower of the two 21 pin terminals at the back of the TV and switch the TV on. If the TV has only one 21 pin connector then this will be able to accept the memory pack.
2. Go into the Service Mode as explained above. The screen will show:–

   Program
   External>>TV
3. Press the blue button on the remote control. The screen will show:–

   Program
   TV>>External
4. Press the STORE button on the TV. The screen will show:–

   Storing
5. All the tuning information stored inside the TV will now be transferred to the Memory Pack. This process will take 2–3 minutes to complete and when finished the screen will show:–

   OK!

Memory Pack to TV Process

1. Plug the memory pack into the lower of the two 21 pin terminals at the back of the TV and switch the TV on. If the TV has only one 21 pin connector then this will be able to accept the memory pack.
2. Go into the Service Mode as explained above. The screen will show:–

   Program
   External>>TV
3. Press the STORE button on the TV. The screen will show:–

   Loading
4. All the tuning information stored inside the Memory Pack will now be transferred to the TV. This process will take 2–3 minutes to complete and when finished the screen will show:–

   OK!
5. The tuning information from the Memory Pack has now been copied into the TV
6. To exit from the Service Mode switch off the TV.
7. The process has now been completed and the Memory Pack can now be removed.

ERRORS

If an error occurs while using the Memory Pack the TV will detect this and the screen will show:–

Program
Error!

If this happens then switch off the TV and repeat the process that was being used. If the errors continue to occur then check the connectors between the TV and the memory pack and check the 9V battery inside the memory pack.

SERVICE HINTS

How to remove the rear cover

1. Remove the 9 fixing screws (A) as shown in Fig.2./Fig.3.

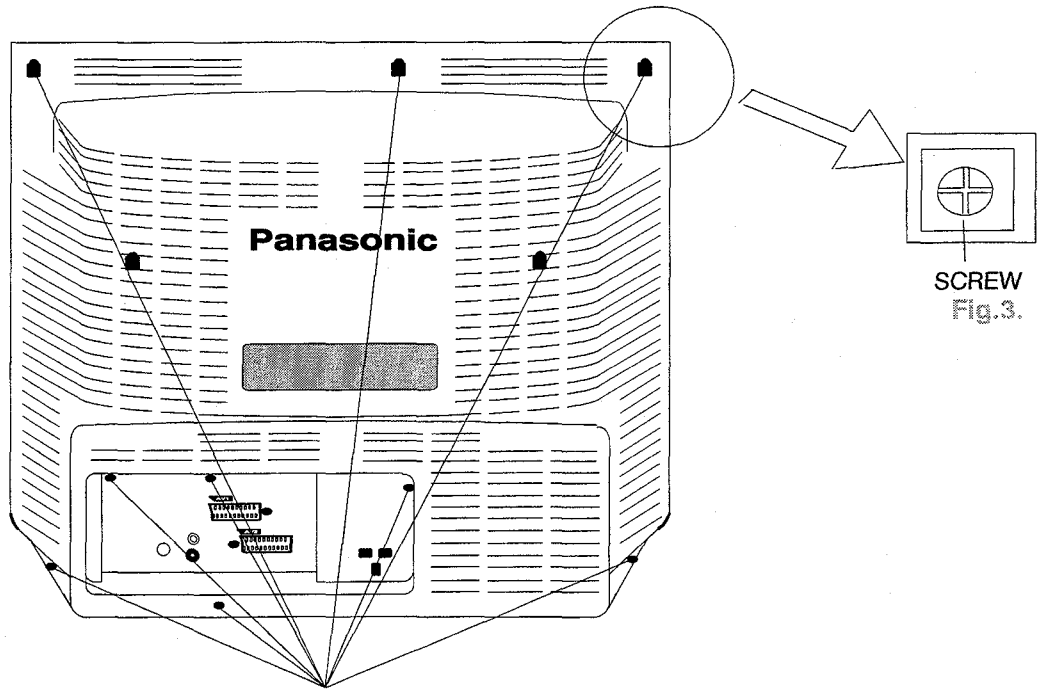


Fig.3.

Fig.2.

LOCATION OF CONTROLS

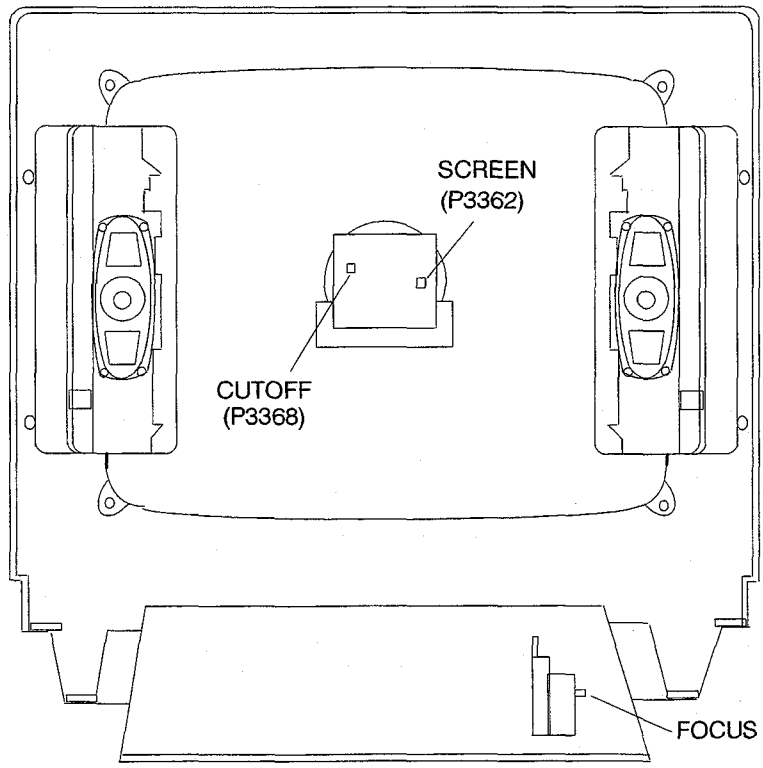
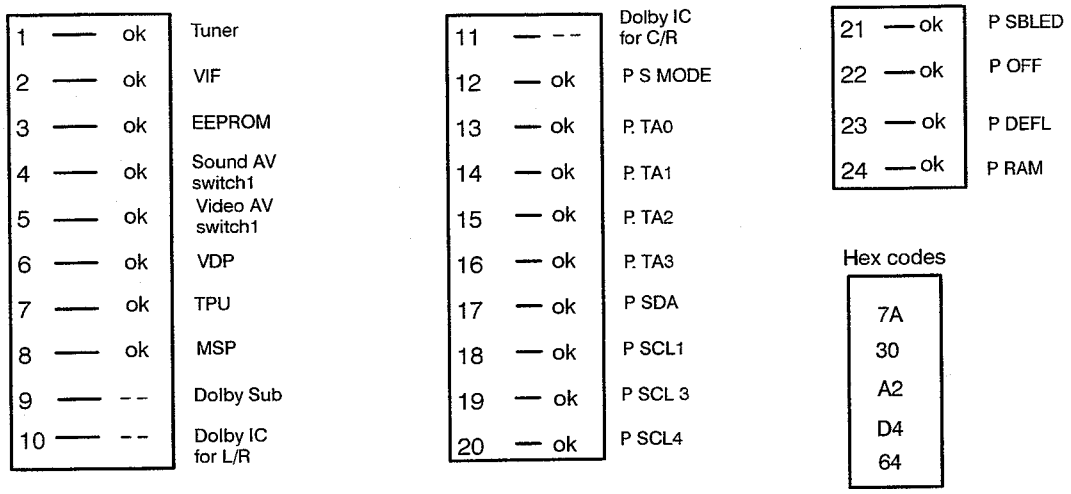


Fig.4.

SELF CHECK

Self check is used to automatically check the Bus lines and Hexadecimal code of the TV set.
To enter the Self Check mode press Function down button, on the Preset Panel, at the same time pressing the Status button, on the Remote Control, and the screen will show:–
When exiting Self Check the customer settings will be returned to factory settings.


1 — ok Tuner
2 — ok VIF
3 — ok EEPROM
4 — ok Sound AV switch1
5 — ok Video AV switch1
6 — ok VDP
7 — ok TPU
8 — ok MSP
9 — -- Dolby Sub
10 — -- Dolby IC for L/R
11 — -- Dolby IC for C/R
12 — ok P S MODE
13 — ok P. TA0
14 — ok P. TA1
15 — ok P. TA2
16 — ok P. TA3
17 — ok P SDA
18 — ok P SCL1
19 — ok P SCL 3
20 — ok P SCL4
21 — ok P SBLED
22 — ok P OFF
23 — ok P DEFL
24 — ok P RAM
Hex codes
7A
30
A2
D4
64

If the CCU ports have been checked and found to be incorrect or not located then "—" will appear in place of "ok".

ADJUSTMENT PROCEDURE

Item/Preparation	Adjustments
+B SET–UP 1. Operate the TV set 2. Set the controls: Brightness minimum Contrast minimum	1. Set the +B voltage up as follows: Adjust **P633** so that **U147** shows 147V ± 0.5V 2. Confirm the following voltages. **U5** 5 + 0.1/–0.25V **U28** 28 ± 1V **U8** 8 + 0.5V/–0.9V **U40** 38.5 + 1.5/–1V **U12** 12 ± 0.5V **U210** 209 ± 10V **U16** 16 + 0.5/–1V **U5SB** 5 ± 0.25V **U25** 24.8 ± 1V **UM** 8 + 0.5V/–0.9V
RF AGC 1. Receive a test pattern. 2. Connect an oscilloscope between the tuner RF AGC and ground. 3. Set the oscilloscope gain range to 1V/div.	1. Check that the noise becomes large when the RF AGC VR **P4701** is turned counterclockwise. After the check turn it clockwise. 2. Gradually turn the RF AGC VR anti–clockwise, and set the RF AGC VR to the point where the RF AGC voltage is just falling to a point where this voltage drops by 0.2V from the maximum value.
CUT OFF 1. Receive a black and white signal. 2. Degauss the tube externally. 3. Set the TV into Service Mode 1. 4. Select Ug2 Test.	1. Confirm which colour has the biggest value 2. Turn the screen VR **P3368** to minimum. 3. Connect an oscilloscope to the cathode with the biggest value colour. 4. Adjust **P3368** to get a low light pulse voltage of 150V ± 5V. 5. Adjust **P3362** to whichever colour reaches 50 ± 10 first. {TX – 25AD2P 100 ± 10 first.}

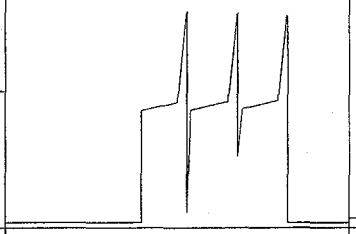
ALIGNMENT SETTINGS (These figures are nominal and used for representative purposes only)

Alignment Function		Settings / Special features
1. Vertical amplitude	V–AMP 051	Optimum setting
2. Vertical symmetry	V–SYM 013	
3. Vertical linearity	V–LIN 012	
4. Vert. D.C.	Vert. D.C. 000	Not to be adjusted.
5. V–Pos.	V. Pos. 003	Optimum setting
6. Horizontal amplitude	H–AMP –033	Optimum setting
7. Horizontal position	H–POS 049	
8. Text Position	TEXT POSITION 045	Optimum setting
9. EW–amplitude	E–W–AMP 1 –058	Optimum setting
10. EW–amplitude	E–W–AMP 2 023	Optimum setting
11. Trapezium–comp	TRAPEZ–1 –014	Optimum setting
12. Trapezium– comp	TRAPEZ–2 012	Optimum setting
13. Colour VCO	Colour VCO 015	Press either Blue or Yellow buttons to effect automatic adjustment
14. Cut–off DC	Cut–off DC 050	Not to be adjusted.
15. Ug2 Test	Ug 2 Test: 107 / 021 / 023	To adjust the screen settings. Turn P3362 until a colour reaches 25 ± 5, place an oscilloscope probe on the cathode with the highest output and adjust P3368 so the oscilloscope trace reads 150V 0–peak, then turn P3362 up so the highest numbered box on the TV screen reads 50 ± 10. {TX – 25AD2P 100 ± 10.}
16. Cutoff	Cutoff: 045 / 055 / 050	Press the GREEN button to step through the settings. Adjust for optimum.
17. White	White: 224 / 255 / 237	Press the GREEN button to step through the settings. Adjust for optimum.

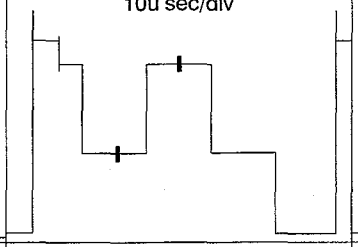
WAVEFORM PATTERN TABLE

PIN 42 I1601
10u sec/div

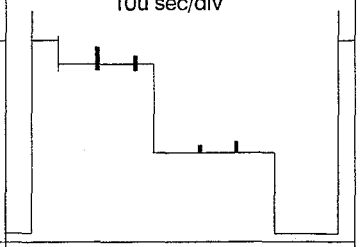
PIN 5 W1651
50u sec/div



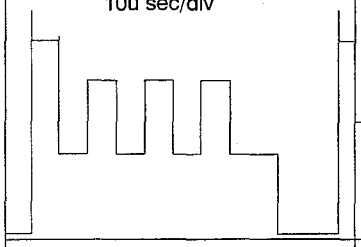
PIN 1 W1651
10u sec/div



PIN 2 W1651
10u sec/div

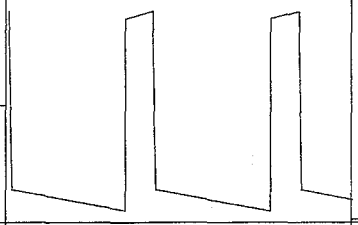


PIN 3 W1651
10u sec/div

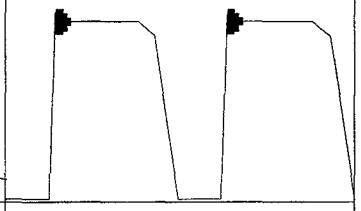


PIN 44 I1601
10u sec/div
(Chroma)

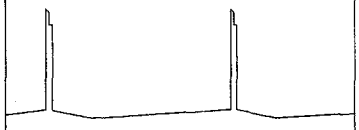
PIN 5 I611
2u sec/div



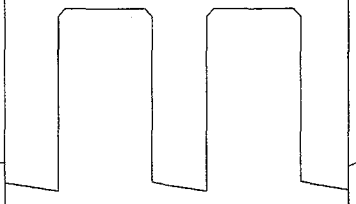
PIN 7 T639
5u sec/div



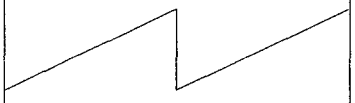
PIN 6 I561
5m sec/div



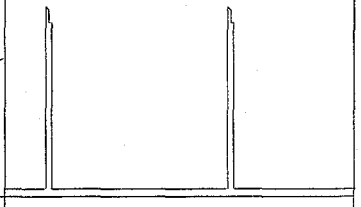
PIN 8 I611
5u sec/div



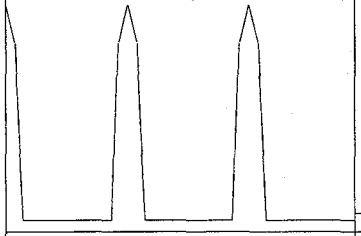
PIN 8 W511
5m sec/div



PIN 11 W511
5m sec/div



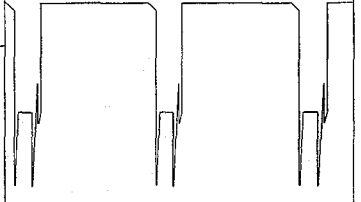
COLLECTOR Q534
64u sec/div



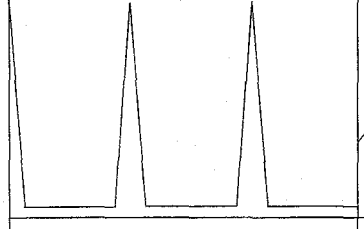
PIN 1 W511
20u sec/div

PIN 6 W511
5m sec/div

BASE Q534
20u sec/div

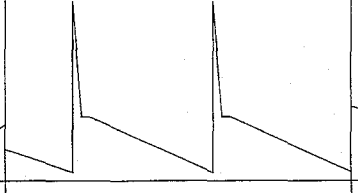


PIN 4 W511
64u sec/div



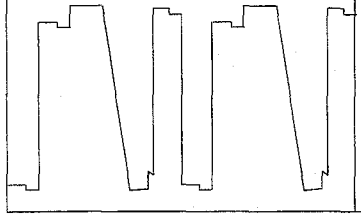
COLLECTOR Q594
5m sec/div

PIN 5 I561
5m sec/div



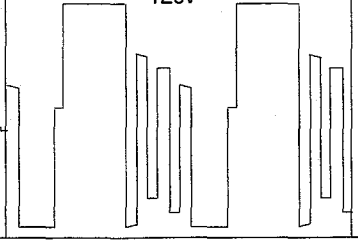
PIN 1 I561
5m sec/div

RED DRIVE
80v

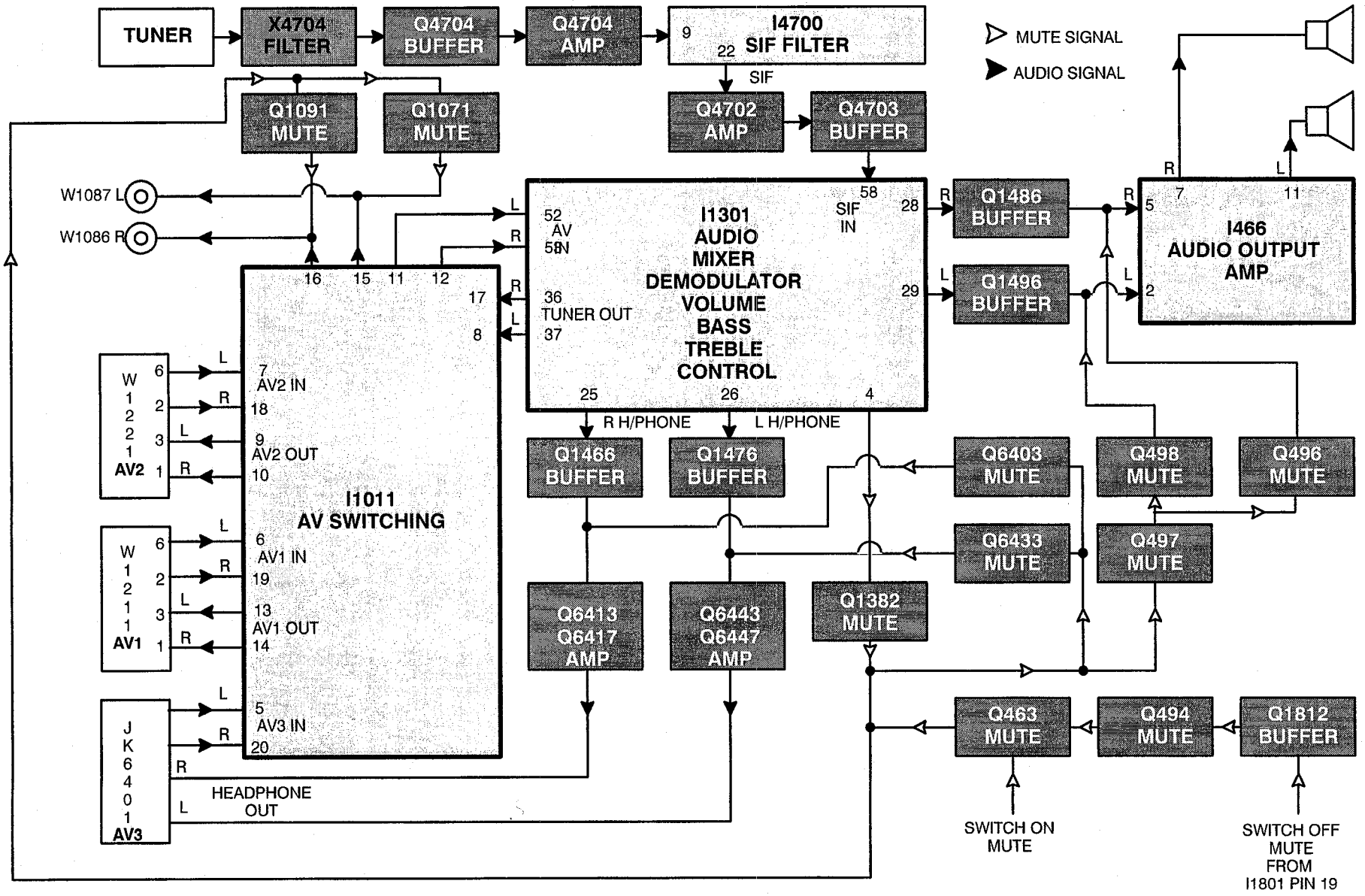


GREEN DRIVE
100v

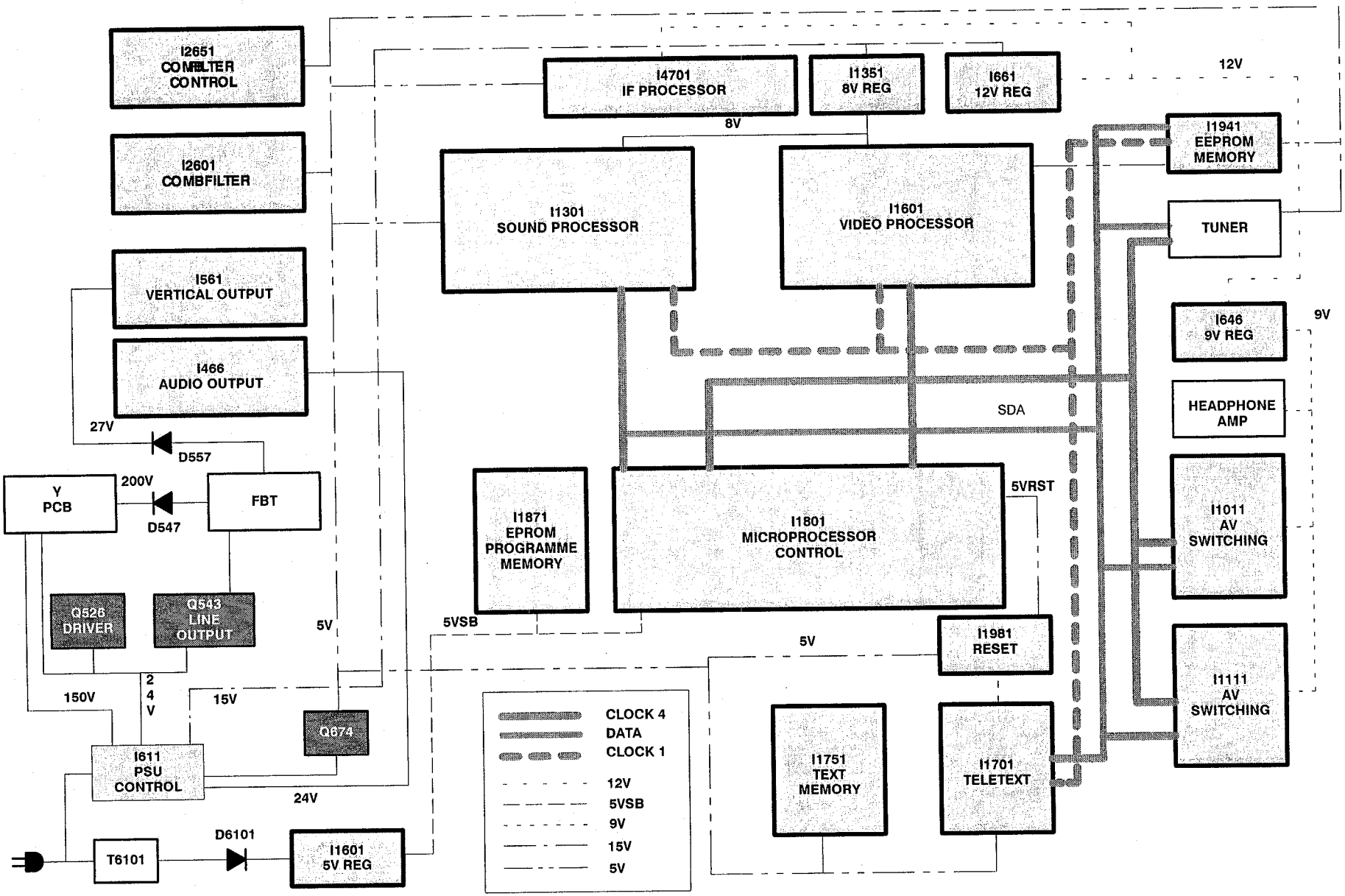
BLUE DRIVE
120v



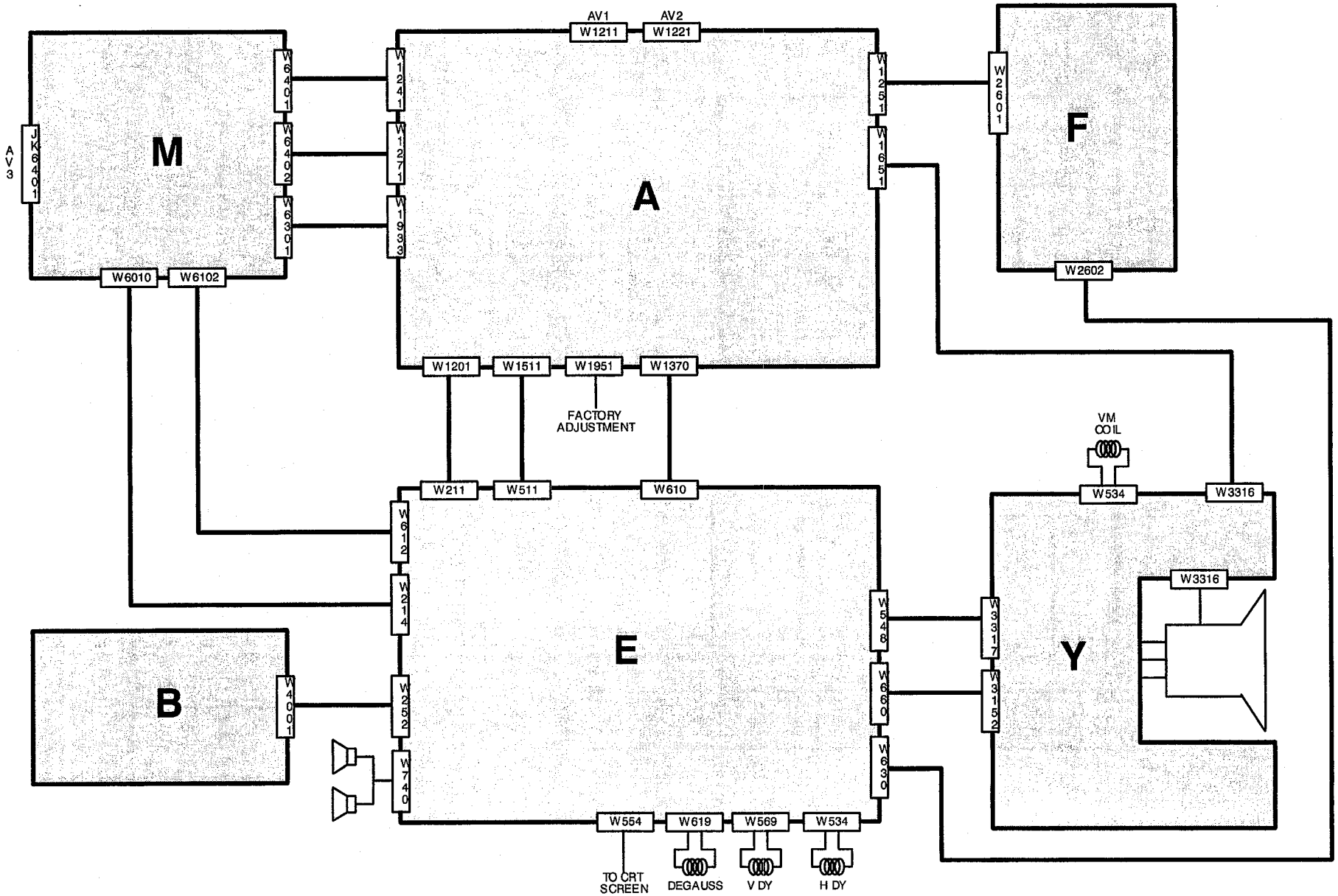
AUDIO BLOCK DIAGRAM



POWER SUPPLY AND CONTROL BLOCK DIAGRAM



WIRING BLOCK DIAGRAM



Ref No.	Part No.	Description			
C2633	ECUV1H103ZFX	S.M.CAP	50V	10nF	
C2634	ECUV1H103ZFX	S.M.CAP	50V	10nF	
C2635	ECUV1H103ZFX	S.M.CAP	50V	10nF	
C2636	ECEA1CKA100	ELECT	16V	10μF	
C2637	ECUV1H330JCX	S.M.CAP	50V	33pF	
C2645	ECUV1H390JCX	S.M.CAP	50V	39pF	
C2651	ECUV1H103ZFX	S.M.CAP	50V	10nF	
C2652	ECUV1H470JCX	S.M.CAP	50V	47pF	
C2653	ECUV1H103ZFX	S.M.CAP	50V	10nF	
C2654	ECUV1H680JCX	S.M.CAP	50V	68pF	
C2655	ECUV1H103ZFX	S.M.CAP	50V	10nF	
C2656	ECUV1H102KBX	S.M.CAP	50V	1nF	
C2657	ECUV1H103ZFX	S.M.CAP	50V	10nF	
C2658	ECEA1HKA4R7	ELECT	50V	4.7μF	
C2660	ECEA1HKA4R7	ELECT	50V	4.7μF	
C2661	ECUV1H103ZFX	S.M.CAP	50V	10nF	
C2662	ECUV1H103ZFX	S.M.CAP	50V	10nF	
C2664	ECEA1HKA4R7	ELECT	50V	4.7μF	
C2665	ECEA1HKA4R7	ELECT	50V	4.7μF	
C2666	ECUV1H103ZFX	S.M.CAP	50V	10nF	
C2667	ECUV1H103ZFX	S.M.CAP	50V	10nF	
C2668	ECEA1HKA0R1	ELECT	50V	0.1μF	
C2669	ECUV1H181JCX	S.M.CAP	50V	180pF	
C2670	ECEA1HKAR33	ELECT	50V	R33μF	
C2671	ECUV1H152KBX	S.M.CAP	50V	1.5pF	
C2672	ECUV1H223KBX	S.M.CAP	50V	22nF	
C2673	ECUV1H820JCX	S.M.CAP	50V	82pF	
C2674	ECEA1HKA4R7	ELECT	50V	4.7μF	
C2675	ECUV1H181JCX	S.M.CAP	50V	180pF	
C2676	ECEA1CKA100	ELECT	16V	10μF	
C2677	ECUV1H103ZFX	S.M.CAP	50V	10nF	
C2678	ECUV1H180JCX	S.M.CAP	50V	18pF	
C2679	ECUV1H103ZFX	S.M.CAP	50V	10nF	
C2680	ECEA1CKA470	ELECT	16V	47μF	
C2681	ECUV1H103ZFX	S.M.CAP	50V	10nF	
C2682	ECEA1CKA100	ELECT	16V	10μF	
C2683	ECUV1H103ZFX	S.M.CAP	50V	10nF	
C2684	ECEA1CKA470	ELECT	16V	47μF	
C2685	ECUV1H103ZFX	S.M.CAP	50V	10nF	
C2686	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C3102	ECUV1H103ZFX	S.M.CAP	50V	10nF	
C3103	ECA1HM100GB	ELECT	50V	10μF	
C3122	ECUV1H102KBX	S.M.CAP	50V	1nF	
C3124	ECUV1H471JCX	S.M.CAP	50V	470pF	
C3131	ECKC2H471J	CERAMIC	500V	470pF	⚠
C3134	ECA1HM101GB	ELECT	50V	100μF	
C3136	ECKC2H471J	CERAMIC	500V	470pF	⚠
C3139	ECA1HM101GB	ELECT	50V	100μF	
C3141	ECA1CM471GB	ELECT	16V	470μF	
C3143	ECA1CM100GB	ELECT	16V	10μF	
C3144	ECA1CM470GB	ELECT	16V	47μF	
C3146	ECEA2EU220	ELECT	250V	22μF	
C3152	ECEA2EU220	ELECT	250V	22μF	
C3153	ECA1VM101GB	ELECT	35V	100μF	
C3167	ECUV1H100DCX	S.M.CAP	50V	10pF	
C3168	ECUV1H103ZFX	S.M.CAP	50V	10nF	
C3169	ECA1CM100GB	ELECT	16V	10μF	
C3177	ECUV1H150JCX	S.M.CAP	50V	15pF	
C3178	ECUV1H103ZFX	S.M.CAP	50V	10nF	
C3179	ECA1CM100GB	ELECT	16V	10μF	
C3187	ECUV1H270JCX	S.M.CAP	50V	27pF	
C3188	ECUV1H103ZFX	S.M.CAP	50V	10nF	
C3189	ECA1CM100GB	ELECT	16V	10μF	
C3356	ECA1CM220GB	ELECT	16V	22μF	
C3357	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C3362	TACA1103P2KV	I.C.			
C3363	TACA1103P2KV	I.C.			
C3366	ECEA2EU220	ELECT	250V	22μF	
C3367	ECQM2104KZ	FILM	250V	100nF	
C3369	ECA1HM010GB	ELECT	50V	1μF	
C3371	ECUV1H150JCX	S.M.CAP	50V	15pF	
C3373	ECUV1H104ZFX	S.M.CAP	50V	100nF	

Ref No.	Part No.	Description		
C3377	ECUV1H681JCX	S.M.CAP	50V	680pF
C3383	ECUV1H104ZFX	S.M.CAP	50V	100nF
C3387	ECUV1H681JCX	S.M.CAP	50V	680pF
C3392	ECA1CM471GB	ELECT	16V	470μF
C3393	ECUV1H104ZFX	S.M.CAP	50V	100nF
C3397	ECUV1H681JCX	S.M.CAP	50V	680pF
C3398	ECKC1H102J	CERAMIC	50V	1000pF
C4701	ECUV1H151JCX	S.M.CAP	50V	150pF
C4702	ECUV1H331JCX	S.M.CAP	50V	330pF
C4703	ECEA1HKAR47	ELECT	50V	0.47μF
C4704	ECUV1H104ZFX	S.M.CAP	50V	100nF
C4705	ECUV1H104ZFX	S.M.CAP	50V	100nF
C4706	ECUV1H104ZFX	S.M.CAP	50V	100nF
C4707	ECUV1H104ZFX	S.M.CAP	50V	100nF
C4708	ECEA1CKA100	ELECT	16V	10μF
C4709	ECUV1H104ZFX	S.M.CAP	50V	100nF
C4710	ECEA1CKA100	ELECT	16V	10μF
C4711	ECUV1H390JPX	S.M.CAP	50V	39pF
C4712	ECUV1H150JCX	S.M.CAP	50V	15pF
C4713	ECUV1H104ZFX	S.M.CAP	50V	100nF
C4714	ECEA1EKA100	ELECT	25V	10μF
C4715	ECUV1H104ZFX	S.M.CAP	50V	100nF
C4716	ECEA1CKA100	ELECT	16V	10μF
C4717	ECUV1H683ZFX	S.M.CAP	50V	68nF
C4718	ECUV1H102KBX	S.M.CAP	50V	1nF
C4719	ECEA1HKAR47	ELECT	50V	0.47μF
C4720	ECUV1H104ZFX	S.M.CAP	50V	100nF
C4721	ECEA1HKA2R2	ELECT	50V	2.2μF
C4722	ECUV1H104ZFX	S.M.CAP	50V	100nF
C4723	ECUV1H104ZFX	S.M.CAP	50V	100nF
C4724	ECUV1H104ZFX	S.M.CAP	50V	100nF
C4725	ECUV1H104ZFX	S.M.CAP	50V	100nF
C4726	ECEA1CKA470	ELECT	16V	47μF
C4729	ECUV1H102KBX	S.M.CAP	50V	1nF
C4730	ECUV1H102KBX	S.M.CAP	50V	1nF
C4733	ECUV1H270JPX	S.M.CAP	50V	27pF
C4742	ECUV1H100DCX	S.M.CAP	50V	10pF
C4744	ECUV1H100DCX	S.M.CAP	50V	10pF
C4745	ECUV1H102KBX	S.M.CAP	50V	1nF
C4746	ECUV1H104ZFX	S.M.CAP	50V	100nF
C4747	ECUV1H102KBX	S.M.CAP	50V	1nF
C4748	ECUV1H102KBX	S.M.CAP	50V	1nF
C4749	ECUV1H102KBX	S.M.CAP	50V	1nF
C4790	ECEA1HKA010	ELECT	50V	1μF
C6101	ECEA1HU471	ELECT	50V	470μF
C6102	ECQM1H334J	FILM	50V	330nF
C6103	ECQM1H104J	FILM	50V	100nF
C6104	ECA0JM222GB	ELECT	6.3V	2.2μF
C6106	ECEA1HU101	ELECT	50V	100μF
C6301	ECA1CM470GB	ELECT	16V	47μF
C6303	ECUV1H103ZFX	S.M.CAP	50V	10nF
C6401	ECA1HM101GB	ELECT	50V	100μF
C6402	ECA1HM101GB	ELECT	50V	100μF
C6403	ECUV1H103ZFX	S.M.CAP	50V	10nF
C6406	ECA1HM4R7GB	ELECT	50V	4.7μF
C6407	ECUV1H102KBX	S.M.CAP	50V	1nF
C6408	ECA1HM4R7GB	ELECT	50V	4.7μF
C6409	ECUV1H561JCX	S.M.CAP	50V	560pF
C6410	ECUV1H561JCX	S.M.CAP	50V	560pF
C6417	ECA1CM471GB	ELECT	16V	470μF
C6418	ECUV1H103ZFX	S.M.CAP	50V	10nF
C6436	ECA1HM4R7GB	ELECT	50V	4.7μF
C6437	ECUV1H102KBX	S.M.CAP	50V	1nF
C6438	ECA1HM4R7GB	ELECT	50V	4.7μF
C6447	ECA1CM471GB	ELECT	16V	470μF
C6448	ECUV1H103ZFX	S.M.CAP	50V	10nF
C6491	ECUV1H271JCX	S.M.CAP	50V	270pF
C6591	ECUV1H271JCX	S.M.CAP	50V	270pF
C6812	222233510154	FILM		0.15μF
C6815	222233510224	FILM		0.22μF

DIODES

Ref No.	Part No.	Description
D206	MA4300	DIODE
D465	MA165TA5	DIODE 1SS133T-77
D466	MA165TA5	DIODE 1SS133T-77
D467	MA165TA5	DIODE 1SS133T-77
D468	MA165TA5	DIODE 1SS133T-77
D471	MA700TA5	DIODE
D481	MA700TA5	DIODE
D491	MA165TA5	DIODE 1SS133T-77
D507	MA723TA5	DIODE
D508	MA723TA5	DIODE
D521	MA170	DIODE
D526	MA165TA5	DIODE 1SS133T-77
D527	EU02	DIODE
D536	ERB0615	DIODE TYPD0753VAG
D537	TVSRU2AM	DIODE
D544	TVSRC2V1	DIODE
D547	AU02V0	DIODE
D548	MA165TA5	DIODE 1SS133T-77
D549	MA165TA5	DIODE 1SS133T-77
D557	EU02	DIODE
D561	ERA15-02V3	DIODE
D562	MA165TA5	DIODE 1SS133T-77
D563	MA165TA5	DIODE 1SS133T-77
D566	MA2082ALFS	DIODE
D567	MTZJT776.2B	DIODE
D568	MA2100LFS	DIODE
D569	MA2082ALFS	DIODE
D591	MTZJT7739D	DIODE
D613	RBV4-08	DIODE
D622	MA171TA5	DIODE
D624	BYT56K15/10	DIODE
D630	MA165TA5	DIODE 1SS133T-77
D636	MA165TA5	DIODE 1SS133T-77
D651	RG4CLFL1	DIODE
D656	EU02	DIODE
D661	ERD32-02L7	DIODE
D671	ERD32-02L7	DIODE
D674	MTZJT-7712C	DIODE
D678	MTZJT772.7B	DIODE
D681	EU02	DIODE
D686	RU4AMLF-M1	DIODE
D1019	PMLL5242B	DIODE
D1020	PMLL5242B	DIODE
D1023	PMLL5242B	DIODE
D1024	PMLL5242B	DIODE
D1033	PMLL5242B	DIODE
D1034	PMLL5242B	DIODE
D1036	PMLL5242B	DIODE
D1038	PMLL5242B	DIODE
D1070	PMLL5242B	DIODE
D1080	RLS72TE-11	DIODE OR PMLL4148
D1081	RLS72TE-11	DIODE OR PMLL4148
D1082	RLS72TE-11	DIODE OR PMLL4148
D1090	PMLL5242B	DIODE
D1121	PMLL5242B	DIODE
D1123	PMLL5242B	DIODE
D1156	PMLL5242B	DIODE
D1158	PMLL5242B	DIODE
D1172	PMLL5242B	DIODE
D1221	PMLL5232B	DIODE
D1222	PMLL5232B	DIODE
D1270	PMLL5242B	DIODE
D1273	PMLL5242B	DIODE
D1282	PMLL5242B	DIODE
D1284	PMLL5242B	DIODE
D1381	PMLL5239B	DIODE
D1382	RLS72TE-11	DIODE OR PMLL4148
D1601	RLS72TE-11	DIODE OR PMLL4148
D1614	RLS72TE-11	DIODE OR PMLL4148
D1617	RLS72TE-11	DIODE OR PMLL4148
D1623	RLS72TE-11	DIODE OR PMLL4148
D1624	RLS72TE-11	DIODE OR PMLL4148
D1672	RLS72TE-11	DIODE OR PMLL4148
D1681	RLS72TE-11	DIODE OR PMLL4148
D1682	RLS72TE-11	DIODE OR PMLL4148
D1717	RLS72TE-11	DIODE OR PMLL4148
D1941	PMLL5232B	DIODE
D3126	RLS72TE-11	DIODE OR PMLL4148
D3127	RLS72TE-11	DIODE OR PMLL4148
D3133	RLS72TE-11	DIODE OR PMLL4148
D3138	RLS72TE-11	DIODE OR PMLL4148
D3368	RLS72TE-11	DIODE OR PMLL4148
D3372	MA165TA5	DIODE 1SS133T-77
D3373	RLS72TE-11	DIODE OR PMLL4148
D3374	RLS72TE-11	DIODE OR PMLL4148
D3377	RLS72TE-11	DIODE OR PMLL4148
D3382	MA165TA5	DIODE 1SS133T-77
D3383	RLS72TE-11	DIODE OR PMLL4148
D3384	RLS72TE-11	DIODE OR PMLL4148
D3387	RLS72TE-11	DIODE OR PMLL4148
D3391	MA165TA5	DIODE 1SS133T-77
D3392	MA165TA5	DIODE 1SS133T-77
D3393	RLS72TE-11	DIODE OR PMLL4148
D3394	RLS72TE-11	DIODE OR PMLL4148
D3397	RLS72TE-11	DIODE OR PMLL4148
D6101	TVSS1WBS20	DIODE
D6103	RLS72TE-11	DIODE OR PMLL4148
D6106	RLS72TE-11	DIODE OR PMLL4148
D6301	LN81RPHL	DIODE
D6381	RLS72TE-11	DIODE OR PMLL4148
D6382	RLS72TE-11	DIODE OR PMLL4148
D6391	RLS72TE-11	DIODE OR PMLL4148
D6392	RLS72TE-11	DIODE OR PMLL4148
D6491	RLS72TE-11	DIODE OR PMLL4148
D6492	RLS72TE-11	DIODE OR PMLL4148
D6591	RLS72TE-11	DIODE OR PMLL4148
D6592	RLS72TE-11	DIODE OR PMLL4148

FUSES

F547	TR5-T2000	FUSE	⚠
F656	TR5-T1250	FUSE	⚠
F661	TR5-T2000	FUSE	⚠
F671	TR5-T2000	FUSE	⚠
F6811	2153.15H	FUSE	⚠
F68111	EYF52BC	FUSE HOLDER	
F68112	EYF52BC	FUSE HOLDER	

TERMINALS AND LINKS

JC1001	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1002	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1003	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1004	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1005	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1006	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1007	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1008	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1009	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1010	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1011	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1012	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1013	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1014	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1015	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1016	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1017	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω

Ref No.	Part No.	Description		
JC1018	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1019	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1020	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1021	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1022	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1023	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1024	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1025	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1026	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1027	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1029	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1030	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1031	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1032	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1033	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1034	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1035	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1036	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1037	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1040	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1041	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1042	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1043	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1044	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1045	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1047	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1048	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1049	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1050	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1051	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1052	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1053	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1054	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1055	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1056	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1057	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1058	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1059	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1060	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1061	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1062	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1064	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1065	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1066	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1067	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1068	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1069	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1070	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1071	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1072	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1073	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1074	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1075	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1076	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1077	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1078	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1079	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1080	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1081	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1082	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1083	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1084	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1085	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1086	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1087	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1088	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1089	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1090	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1091	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1093	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1094	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1095	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω

Ref No.	Part No.	Description		
JC1096	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1097	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1098	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1099	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1100	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1101	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1102	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1103	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1104	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1105	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1106	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1107	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1108	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1109	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1111	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1112	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1113	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1114	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω
JC1115	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1116	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1117	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1119	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1121	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1122	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1123	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1124	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1125	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1126	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JC1127	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
JK6401	TJB16656	A.V. TERMINAL		
J2	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
J12	EXCELSA39V	COIL		
J23	EXCELSA39V	COIL		
J204	EXCELSA35T	COIL		

COILS

L204	ELER220KA	COIL
L206	EXCELSA35T	COIL
L507	TLT331K991R	COIL
L511	297-23477	TRANSFORMER
L538	297-23293	COIL
L541	ELH5L7002	COIL
L542	ELC08D055	COIL
L554	ELER220KA	COIL
L594	297-017696	COIL
L624	EXCELSA35T	COIL
L626	EXCELSR35S	COIL
L650	EXCELDR35C	COIL
L661	EXCELDR35V	COIL
L671	EXCELDR35V	COIL
L686	EXCELSA35T	COIL
L1037	TSC925-4	CHOKE
L1301	EXCELDR35V	COIL
L1303	EXCELDR35V	COIL
L1351	ELEV4R7KA	COIL
L1413	ELEV6R8KA	COIL
L1601	ELEV4R7KA	COIL
L1606	EXCELDR35V	COIL
L1611	ELEV4R7KA	COIL
L1619	EXCELDR35V	COIL
L1622	ELEV4R7KA	COIL
L1634	EXCEMT101BT	COIL
L1644	EXCEMT101BT	COIL
L1652	ELEV4R7KA	COIL
L1654	EXCEMT101BT	COIL
L1684	ELEMV1R5MA	COIL
L1687	ELEMV1R5MA	COIL
L1691	EXCEMT101BT	COIL
L1692	EXCEMT101BT	COIL
L1693	EXCEMT101BT	COIL

Ref No.	Part No.	Description
L1694	EXCEMT101BT	COIL
L1701	ELEV4R7KA	COIL
L1714	EXCELDR35V	COIL
L1751	EXCELDR35V	COIL
L1801	ELEV4R7KA	COIL
L1837	EXCELDR35V	COIL
L1845	ELEV3R3KA	COIL
L1857	ELEV3R3KA	COIL
L1859	ELEV3R3KA	COIL
L1871	EXCELDR35V	COIL
L1878	ELEV3R3KA	COIL
L1888	ELEV4R7KA	COIL
L1931	ELEV4R7KA	COIL
L1941	EXCELDR35V	COIL
L1972	EXCELDR35V	COIL
L1974	EXCELDR35V	COIL
L1977	EXCELDR35V	COIL
L2601	TLT390K991R	COIL
L2602	TLT221K991R	COIL
L2603	TLT221K991R	COIL
L2604	TLT221K991R	COIL
L2605	TLT220K991R	COIL
L2606	TLT047K991R	COIL
L2607	TLT220K991R	COIL
L2608	EXCELDR35V	COIL
L2609	EXCELDR35V	COIL
L2637	TLT068K991R	COIL
L2651	TLT150K991R	COIL
L2653	TLT101K991R	COIL
L2654	TLT101K991R	COIL
L2655	TLT101K991R	COIL
L2656	TLT100K991R	COIL
L3161	SDL-4101	COIL
L3171	SDL-4101	COIL
L3181	SDL-4101	COIL
L4701	TLTR47K991R	COIL
L4704	TLT022K991R	COIL
L4705	EIV7EN200B	COIL
L4706	EIV7EN201B	COIL
L4707	TLT100K991R	COIL
L6403	ELEBT6R8KA	COIL
L6404	ELEBT6R8KA	COIL
L6417	ELEBT6R8KA	COIL
L6447	ELEBT6R8KA	COIL
L6811	ELF18D415F	FILTER
L6812	ELF18D415F	FILTER

CONTROLS

P633	EVMEASA00B52	CONTROL 500Ω
P2601	EVNDXAA03B13	CONTROL 1KΩ
P3362	RH092GDJ6J	VARIABLE RESISTOR
P3368	EVN65UA00B24	CONTROL 20KΩ
P4701	EVNDXAA03B53	CONTROL 5KΩ

TRANSISTORS

Q463	BC557B	TRANSISTOR
Q465	BC547B	TRANSISTOR
Q494	BC547B	TRANSISTOR
Q496	BC547B	TRANSISTOR
Q497	BC557B	TRANSISTOR
Q498	BC547B	TRANSISTOR
Q506	2SK301TA	TRANSISTOR
Q526	2SD836-AL	TRANSISTOR
Q534	BU2508AXRL	TRANSISTOR
Q591	BC557B	TRANSISTOR
Q592	BC557B	TRANSISTOR
Q593	BC547B	TRANSISTOR
Q594	2SD1265A	TRANSISTOR

Ref No.	Part No.	Description
Q624	2SK1118LB	TRANSISTOR
Q651	TFD312SOF632	DIODE
Q667	BC547B	TRANSISTOR
Q674	BUZ71AF1	TRANSISTOR
Q681	BC557B	TRANSISTOR
Q682	2SA1535LB	TRANSISTOR
Q1071	BC817-25	TRANSISTOR
Q1091	BC817-25	TRANSISTOR
Q1123	BC847B	TRANSISTOR OR 2SD601ATX
Q1163	BC847B	TRANSISTOR OR 2SD601ATX
Q1167	BC857B	TRANSISTOR OR 2SB709ATX
Q1172	BC847B	TRANSISTOR OR 2SD601ATX
Q1182	BC847B	TRANSISTOR OR 2SD601ATX
Q1192	BC847B	TRANSISTOR OR 2SD601ATX
Q1221	BC847B	TRANSISTOR OR 2SD601ATX
Q1222	BC847B	TRANSISTOR OR 2SD601ATX
Q1267	BC847B	TRANSISTOR OR 2SD601ATX
Q1382	BC857B	TRANSISTOR OR 2SB709ATX
Q1466	BC860B	TRANSISTOR
Q1476	BC860B	TRANSISTOR
Q1486	BC860B	TRANSISTOR
Q1496	BC860B	TRANSISTOR
Q1612	BC847B	TRANSISTOR OR 2SD601ATX
Q1631	BC847B	TRANSISTOR OR 2SD601ATX
Q1633	BC847B	TRANSISTOR OR 2SD601ATX
Q1636	BC857B	TRANSISTOR OR 2SB709ATX
Q1641	BC847B	TRANSISTOR OR 2SD601ATX
Q1643	BC847B	TRANSISTOR OR 2SD601ATX
Q1646	BC857B	TRANSISTOR OR 2SB709ATX
Q1651	BC847B	TRANSISTOR OR 2SD601ATX
Q1653	BC847B	TRANSISTOR OR 2SD601ATX
Q1656	BC857B	TRANSISTOR OR 2SB709ATX
Q1663	BC847B	TRANSISTOR OR 2SD601ATX
Q1664	BC847B	TRANSISTOR OR 2SD601ATX
Q1667	BC847B	TRANSISTOR OR 2SD601ATX
Q1673	BC847B	TRANSISTOR OR 2SD601ATX
Q1812	BC847B	TRANSISTOR OR 2SD601ATX
Q1816	BC847B	TRANSISTOR OR 2SD601ATX
Q1822	BC847B	TRANSISTOR OR 2SD601ATX
Q1824	BC847B	TRANSISTOR OR 2SD601ATX
Q1827	BC857B	TRANSISTOR OR 2SB709ATX
Q1831	BC847B	TRANSISTOR OR 2SD601ATX
Q2601	BC847B	TRANSISTOR OR 2SD601ATX
Q2602	BC847B	TRANSISTOR OR 2SD601ATX
Q2603	BC847B	TRANSISTOR OR 2SD601ATX
Q2604	BC847B	TRANSISTOR OR 2SD601ATX
Q2605	BC857B	TRANSISTOR OR 2SB709ATX
Q2606	BC857B	TRANSISTOR OR 2SB709ATX
Q2607	BC847B	TRANSISTOR OR 2SD601ATX
Q2608	BC847B	TRANSISTOR OR 2SD601ATX
Q2609	BC857B	TRANSISTOR OR 2SB709ATX
Q2610	BC857B	TRANSISTOR OR 2SB709ATX
Q2611	BC857B	TRANSISTOR OR 2SB709ATX
Q2612	BC857B	TRANSISTOR OR 2SB709ATX
Q2613	BC847B	TRANSISTOR OR 2SD601ATX
Q2614	BC847B	TRANSISTOR OR 2SD601ATX
Q2615	BC857B	TRANSISTOR OR 2SB709ATX
Q2616	BC847B	TRANSISTOR OR 2SD601ATX
Q2651	BC847B	TRANSISTOR OR 2SD601ATX
Q2653	BC847B	TRANSISTOR OR 2SD601ATX
Q3108	BC847B	TRANSISTOR OR 2SD601ATX
Q3109	BC847B	TRANSISTOR OR 2SD601ATX
Q3111	BC857B	TRANSISTOR OR 2SB709ATX
Q3122	BC847B	TRANSISTOR OR 2SD601ATX
Q3126	BC847B	TRANSISTOR OR 2SD601ATX
Q3127	BC857B	TRANSISTOR OR 2SB709ATX
Q3131	2SB940APLB	TRANSISTOR
Q3136	2SD1264APLB	TRANSISTOR
Q3143	BC847B	TRANSISTOR OR 2SD601ATX
Q3162	BC857B	TRANSISTOR OR 2SB709ATX
Q3164	BC847B	TRANSISTOR OR 2SD601ATX
Q3166	BC857B	TRANSISTOR OR 2SB709ATX

Ref No.	Part No.	Description
Q3169	BC857B	TRANSISTOR OR 2SB709ATX
Q3172	BC857B	TRANSISTOR OR 2SB709ATX
Q3174	BC847B	TRANSISTOR OR 2SD601ATX
Q3176	BC857B	TRANSISTOR OR 2SB709ATX
Q3179	BC857B	TRANSISTOR OR 2SB709ATX
Q3182	BC857B	TRANSISTOR OR 2SB709ATX
Q3184	BC847B	TRANSISTOR OR 2SD601ATX
Q3186	BC857B	TRANSISTOR OR 2SB709ATX
Q3189	BC857B	TRANSISTOR OR 2SB709ATX
Q3359	BC847B	TRANSISTOR OR 2SD601ATX
Q3368	2SB710A-XR	TRANSISTOR
Q3371	BC857B	TRANSISTOR OR 2SB709ATX
Q3373	2SC4714RL2	TRANSISTOR
Q3374	2SC3063RL	TRANSISTOR
Q3377	2SA1698RL	TRANSISTOR
Q3381	BC857B	TRANSISTOR OR 2SB709ATX
Q3383	2SC4714RL2	TRANSISTOR
Q3384	2SC3063RL	TRANSISTOR
Q3387	2SA1698RL	TRANSISTOR
Q3391	BC857B	TRANSISTOR OR 2SB709ATX
Q3392	2SA1309ATA	TRANSISTOR
Q3393	2SC4714RL2	TRANSISTOR
Q3394	2SC3063RL	TRANSISTOR
Q3397	2SA1698RL	TRANSISTOR
Q4701	BC847B	TRANSISTOR OR 2SD601ATX
Q4702	BC847B	TRANSISTOR OR 2SD601ATX
Q4703	BC847B	TRANSISTOR OR 2SD601ATX
Q4704	BF370-126	TRANSISTOR
Q4705	BF370-126	TRANSISTOR
Q6111	BC847B	TRANSISTOR OR 2SD601ATX
Q6114	BC847B	TRANSISTOR OR 2SD601ATX
Q6403	BC847B	TRANSISTOR OR 2SD601ATX
Q6413	BC847B	TRANSISTOR OR 2SD601ATX
Q6417	BC857B	TRANSISTOR OR 2SB709ATX
Q6433	BC847B	TRANSISTOR OR 2SD601ATX
Q6443	BC847B	TRANSISTOR OR 2SD601ATX
Q6447	BC857B	TRANSISTOR OR 2SB709ATX

RESISTOR

RL6101	TSE10818	RELAY			
R201	ERD25TJ223	CARBON	0.25W	5%	22KΩ
R206	ERG2ANJ223	METAL	2W	5%	22KΩ
R259	ERD25TJ473	CARBON	0.25W	5%	47KΩ
R462	ERD25TJ101	CARBON	0.25W	5%	100Ω
R463	ERD25TJ103	CARBON	0.25W	5%	10KΩ
R466	ERD25TJ153	CARBON	0.25W	5%	15KΩ
R470	ERD25TJ270	CARBON	0.25W	5%	27Ω
R471	ERD25TJ102	CARBON	0.25W	5%	1KΩ
R472	ERD25TJ333	CARBON	0.25W	5%	33KΩ
R473	ERD25TJ2R7	CARBON	0.25W	5%	2R7Ω
R477	ERD25TJ105	CARBON	0.25W	5%	1MΩ
R478	ERD25TJ332	CARBON	0.25W	5%	3K3Ω
R479	ERDS1TJ2R2	CARBON	0.5W	5%	2R2Ω
R480	ERD25TJ270	CARBON	0.25W	5%	27Ω
R481	ERD25TJ102	CARBON	0.25W	5%	1KΩ
R482	ERD25TJ333	CARBON	0.25W	5%	33KΩ
R483	ERD25TJ2R7	CARBON	0.25W	5%	2R7Ω
R484	ERD25TJ273	CARBON	0.25W	5%	27KΩ
R485	ERD25TJ561	CARBON	0.25W	5%	560Ω
R486	ERD25TJ333	CARBON	0.25W	5%	33KΩ
R487	ERD25TJ105	CARBON	0.25W	5%	1MΩ
R488	ERD25TJ332	CARBON	0.25W	5%	3K3Ω
R489	ERDS1TJ2R2	CARBON	0.5W	5%	2R2Ω
R490	ERD25TJ563	CARBON	0.25W	5%	56KΩ
R491	ERQ14AJ100	METAL	0.25W	5%	10Ω ⚠
R492	ERD25TJ102	CARBON	0.25W	5%	1KΩ
R493	ERD25TJ473	CARBON	0.25W	5%	47KΩ
R494	ERD25TJ684	CARBON	0.25W	5%	680KΩ
R496	ERD25TJ103	CARBON	0.25W	5%	10KΩ
R497	ERD25TJ103	CARBON	0.25W	5%	10KΩ
R498	ERD25TJ103	CARBON	0.25W	5%	10KΩ
R499	ERD25TJ473	CARBON	0.25W	5%	47KΩ
R501	ERD25TJ470	CARBON	0.25W	5%	47Ω
R507	ERD25TJ2R2	CARBON	0.25W	5%	2R2Ω
R521	ERQ14AJ3R3	METAL	0.25W	5%	3R3Ω ⚠
R526	ERD25TJ560	CARBON	0.25W	5%	56Ω
R527	ERDS1TJ152	CARBON	0.5W	5%	1K5Ω
R528	ERDS1TJ152	CARBON	0.5W	5%	1K5Ω
R531	ERF10ZK6R8	WIRE	10W	5%	6R8Ω ⚠
R532	ERW2PKR47	WIREWOUND	2W	10%	R47Ω ⚠
R533	ERDS1TJ220	CARBON	0.5W	5%	22Ω
R541	ERG1ANJ152	METAL	1W	5%	1K5Ω
R542	ERQ1ABJ151U	FUSIBLE	1W	5%	150Ω ⚠
R543	ERD25TJ103	CARBON	0.25W	5%	10KΩ
R546	ERDS1TJ184	CARBON	0.5W	5%	180K
R548	ERD25TJ223	CARBON	0.25W	5%	22KΩ
R549	ERDS1TJ224	CARBON	0.5W	5%	220KΩ
R557	ERQ12HKR22	FUSIBLE	0.5W	5%	R22Ω ⚠
R559	ERDS1TJ100	CARBON	0.5W	5%	10Ω
R561	ERQ12HJ1R5	FUSIBLE	0.5W	5%	1R5Ω ⚠
R563	ERD25TJ104	CARBON	0.25W	5%	100KΩ
R564	ERD25TJ223	CARBON	0.25W	5%	22KΩ
R566	ERD25TJ472	CARBON	0.25W	5%	4K7Ω
R567	ERD25TJ472	CARBON	0.25W	5%	4K7Ω
R568	ERD25TJ1R5	CARBON	0.25W	5%	1R5Ω
R569	ERDS1TJ221	CARBON	0.5W	5%	220Ω
R572	ERO25CKF1801	METAL	0.25W	1%	1K8Ω ⚠
R573	ERO25CKF1801	METAL	0.25W	1%	1K8Ω ⚠
R574	ERW12PKR56	WIREWOUND	0.5W	10%	R56Ω ⚠
R576	ERD25TJ682	CARBON	0.25W	5%	6K8Ω
R577	ERD25TJ822	CARBON	0.25W	5%	8K2Ω
R578	ERD25TJ680	CARBON	0.25W	5%	68Ω
R579	ERD25TJ332	CARBON	0.25W	5%	3K3Ω
R583	ERD25TJ103	CARBON	0.25W	5%	10KΩ
R584	ERO25CKF1002	METAL	0.25W	1%	10KΩ ⚠
R590	ERD25TJ224	CARBON	0.25W	5%	220KΩ
R591	ERD25TJ472	CARBON	0.25W	5%	4K7Ω
R592	ERD25TJ103	CARBON	0.25W	5%	10KΩ
R593	ERD25TJ103	CARBON	0.25W	5%	10KΩ
R594	ERD25TJ394	CARBON	0.25W	5%	390KΩ
R595	ERD25TJ473	CARBON	0.25W	5%	47KΩ
R596	ERD25TJ473	CARBON	0.25W	5%	47KΩ
R597	ERD25TJ475	CARBON	0.25W	5%	4M7Ω
R598	ERD25TJ102	CARBON	0.25W	5%	1KΩ
R599	ERD25TJ103	CARBON	0.25W	5%	10KΩ
R613	ERF10ZK5R6	WIRE	10W	5%	5R6Ω ⚠
R614	ERDS1TJ394	CARBON	0.5W	5%	390KΩ
R616	ERC12GK154D	SOLID	0.5W	10%	150KΩ
R619	232266296706	THERMISTOR			
R621	ERG2FJ183	METAL	0.5W	5%	18KΩ ⚠
R622	ERDS1TJ394	CARBON	0.5W	5%	390KΩ
R623	ERD25TJ472	CARBON	0.25W	5%	4K7Ω
R624	ERD25TJ121	CARBON	0.25W	5%	120Ω
R625	ERC12GK154D	SOLID	0.5W	10%	150KΩ
R626	ERG2FJ183	METAL	0.5W	5%	18KΩ ⚠
R627	ERD25TJ103	CARBON	0.25W	5%	10KΩ
R628	ERG3FJ393	METAL	0.25W	5%	39KΩ ⚠
R629	ERG1ANJ470	METAL	1W	5%	47Ω
R630	ERD25TJ270	CARBON	0.25W	5%	27Ω
R631	ERD25TJ101	CARBON	0.25W	5%	100Ω
R632	ERO25CKF1400	METAL	0.25W	1%	140Ω ⚠
R633	ERO25CKF3921	METAL	0.25W	1%	39KΩ ⚠
R634	ERDS1TJ1R5	CARBON	0.5W	5%	1R5Ω
R636	ERD25TJ473	CARBON	0.25W	5%	47KΩ
R639	ERD75TAJ825	CARBON	0.75W	5%	8M2Ω ⚠
R651	ERDS1TJ474	CARBON	0.5W	5%	470KΩ
R652	ERD25TJ102	CARBON	0.25W	5%	1KΩ
R666	ERO25CKF3301	METAL	0.25W	1%	3K3Ω ⚠
R667	ERO25CKF3900	METAL	0.25W	1%	3R9KΩ ⚠
R674	ERD25TJ223	CARBON	0.25W	5%	22KΩ
R675	ERD25TJ155	CARBON	0.25W	5%	1M5Ω

Ref No.	Part No.	Description				
R676	ERO25CKF1002	METAL	0.25W	1%	10KΩ	⚠
R677	ERO25CKF1002	METAL	0.25W	1%	10KΩ	⚠
R678	ERD25TJ121	CARBON	0.25W	5%	120Ω	
R680	ERQ12HJ1R5	FUSIBLE	0.5W	5%	1R5Ω	⚠
R681	ERDS1TJ4R7	CARBON	0.5W	5%	4R7Ω	
R682	ERD25TJ222	CARBON	0.25W	5%	2K2Ω	
R683	ERG3FJ101	METAL	3W	5%	100Ω	⚠
R684	ERD25TJ682	CARBON	0.25W	5%	6K8Ω	
R686	FN4R1KR	FUSIBLE	0.25W	5%	4R1Ω	
R688	FN4R1KR	FUSIBLE	0.25W	5%	4R1Ω	
R1001	ERQ14AJ3R3	METAL	0.25W	5%	3R3Ω	⚠
R1011	ERQ14AJ100	METAL	0.25W	5%	10Ω	⚠
R1019	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R1020	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R1021	ERJ6GEYJ153	S.M.CARB	0.1W	5%	15KΩ	
R1022	ERJ6GEYJ153	S.M.CARB	0.1W	5%	15KΩ	
R1023	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R1024	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R1031	ERJ6GEYJ153	S.M.CARB	0.1W	5%	15KΩ	
R1032	ERJ6GEYJ153	S.M.CARB	0.1W	5%	15KΩ	
R1033	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R1034	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R1036	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R1038	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R1041	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R1042	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R1071	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47KΩ	
R1072	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R1073	ERJ6GEYJ152	S.M.CARB	0.1W	5%	1K5Ω	
R1074	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω	
R1091	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47KΩ	
R1092	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R1093	ERJ6GEYJ152	S.M.CARB	0.1W	5%	1K5Ω	
R1094	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω	
R1095	ERJ6GEYJ474	S.M.CARB	0.1W	5%	470KΩ	
R1116	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100KΩ	
R1117	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100KΩ	
R1120	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R1121	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75Ω	
R1122	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75Ω	
R1123	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R1124	ERJ6GEYJ151	S.M.CARB	0.1W	5%	150Ω	
R1125	ERJ6GEYJ151	S.M.CARB	0.1W	5%	150Ω	
R1126	ERQ14AJ100	METAL	0.25W	5%	10Ω	⚠
R1127	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω	
R1131	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R1132	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R1133	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R1151	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75Ω	
R1152	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100KΩ	
R1153	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100KΩ	
R1156	ERJ6GEYJ470	S.M.CARB	0.1W	5%	47Ω	
R1158	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R1159	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75Ω	
R1161	ERJ6GEYJ682	S.M.CARB	0.1W	5%	6K8Ω	
R1162	ERJ6GEYJ333	S.M.CARB	0.1W	5%	33KΩ	
R1163	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω	
R1166	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R1167	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R1168	ERJ6GEYJ680	S.M.CARB	0.1W	5%	68Ω	
R1169	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω	
R1171	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75Ω	
R1172	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R1173	ERJ6GEYJ151	S.M.CARB	0.1W	5%	150Ω	
R1174	ERJ6GEYJ151	S.M.CARB	0.1W	5%	150Ω	
R1177	ERJ6GEYJ561	S.M.CARB	0.1W	5%	560Ω	
R1178	ERQ14AJ100	METAL	0.25W	5%	10Ω	⚠
R1181	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R1182	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R1183	ERJ6GEYJ680	S.M.CARB	0.1W	5%	68Ω	
R1184	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	

Ref No.	Part No.	Description			
R1185	ERJ6GEYJ151	S.M.CARB	0.1W	5%	150Ω
R1191	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R1192	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1193	ERJ6GEYJ680	S.M.CARB	0.1W	5%	68Ω
R1194	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R1195	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75Ω
R1221	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47KΩ
R1222	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47KΩ
R1225	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1237	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R1241	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R1242	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R1251	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75Ω
R1261	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
R1263	ERJ8GEYJ104	S.M.CAR	.125W	5%	100KΩ
R1264	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100KΩ
R1266	ERJ6GEYJ680	S.M.CARB	0.1W	5%	68Ω
R1267	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1268	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R1269	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75Ω
R1270	ERJ6GEYJ470	S.M.CARB	0.1W	5%	47Ω
R1271	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75Ω
R1272	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75Ω
R1273	ERJ6GEYJ470	S.M.CARB	0.1W	5%	47Ω
R1276	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100KΩ
R1277	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100KΩ
R1281	ERJ6GEYJ153	S.M.CARB	0.1W	5%	15KΩ
R1282	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1283	ERJ6GEYJ153	S.M.CARB	0.1W	5%	15KΩ
R1284	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1349	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47KΩ
R1381	ERJ6GEYJ223	S.M.CARB	0.1W	5%	22KΩ
R1382	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47KΩ
R1386	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
R1412	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω
R1464	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1465	ERJ6GEYJ183	S.M.CARB	0.1W	5%	18KΩ
R1466	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2Ω
R1467	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
R1474	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1476	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2Ω
R1477	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
R1484	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1486	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2Ω
R1487	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω
R1494	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1496	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2Ω
R1497	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω
R1608	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
R1612	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1613	ERJ6GEYJ560	S.M.CARB	0.1W	5%	56Ω
R1614	ERJ6GEYJ331	S.M.CARB	0.1W	5%	330Ω
R1615	ERJ6GEYJ221	S.M.CARB	0.1W	5%	220Ω
R1616	ERJ6GEYJ151	S.M.CARB	0.1W	5%	150Ω
R1617	ERJ6GEYJ333	S.M.CARB	0.1W	5%	33KΩ
R1618	ERJ6GEYJ151	S.M.CARB	0.1W	5%	150Ω
R1619	ERJ6GEYJ151	S.M.CARB	0.1W	5%	150Ω
R1621	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R1622	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R1623	ERJ6GEYJ123	S.M.CARB	0.1W	5%	12KΩ
R1624	ERJ6GEYJ333	S.M.CARB	0.1W	5%	33KΩ
R1626	ECUV1H151JCX	S.M.CAP	50V	150pF	
R1627	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75Ω
R1630	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1631	ERJ6GEYJ470	S.M.CARB	0.1W	5%	47Ω
R1632	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω
R1633	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1634	ERJ6GEYJ332	S.M.CARB	0.1W	5%	3K3Ω
R1636	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75Ω
R1637	ERJ8GEYJ471	S.M.CAR	.125W	5%	470Ω
R1641	ERJ6GEYJ821	S.M.CARB	0.1W	5%	820Ω

Ref No.	Part No.	Description			
R1642	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω
R1643	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1644	ERJ6GEYJ332	S.M.CARB	0.1W	5%	3K3Ω
R1646	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75Ω
R1647	ERJ8GEYJ471	S.M.CAR	.125W	5%	470Ω
R1652	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω
R1653	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1654	ERJ6GEYJ332	S.M.CARB	0.1W	5%	3K3Ω
R1656	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75Ω
R1657	ERJ8GEYJ471	S.M.CAR	.125W	5%	470Ω
R1661	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1664	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1666	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1667	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100KΩ
R1668	ERJ6GEYJ474	S.M.CARB	0.1W	5%	470KΩ
R1669	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1670	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1671	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1672	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1673	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1674	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1680	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75Ω
R1681	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1682	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47KΩ
R1683	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R1684	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
R1691	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75Ω
R1692	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75Ω
R1693	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75Ω
R1694	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75Ω
R1696	ERJ8GEYJ103	S.M.CAR	.125W	5%	10KΩ
R1698	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1717	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R1718	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R1719	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1753	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
R1807	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2Ω
R1808	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1809	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1811	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1812	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1815	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1816	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47KΩ
R1819	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1821	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R1822	ERJ6GEYJ392	S.M.CARB	0.1W	5%	3K9Ω
R1823	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1824	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47KΩ
R1825	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1826	ERJ6GEYJ563	S.M.CARB	0.1W	5%	56KΩ
R1827	ERJ6GEYJ393	S.M.CARB	0.1W	5%	39KΩ
R1828	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1829	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R1831	ERJ6GEYJ392	S.M.CARB	0.1W	5%	3K9Ω
R1832	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1837	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R1838	ERJ6GEYJ331	S.M.CARB	0.1W	5%	330Ω
R1840	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
R1842	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R1843	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1844	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R1845	ERJ6GEYJ470	S.M.CARB	0.1W	5%	47Ω
R1847	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R1849	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R1850	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
R1851	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1856	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1857	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1858	ERJ8GEYJ103	S.M.CAR	.125W	5%	10KΩ
R1859	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1863	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1872	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω

Ref No.	Part No.	Description			
R1873	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R1878	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1879	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R1882	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R1884	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2Ω
R1885	ERJ8GEY0R00	S.M.CAR	.125W	5%	0Ω
R1886	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2Ω
R1887	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
R1888	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1889	ERJ8GEY0R00	S.M.CAR	.125W	5%	0Ω
R1893	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1897	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R1920	ERJ8GEYJ223	S.M.CAR	.125	5%	22KΩ
R1921	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1922	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω
R1925	ERJ6GEYJ331	S.M.CARB	0.1W	5%	330Ω
R1933	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
R1941	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
R1953	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1957	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1958	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1959	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1961	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1962	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1963	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1964	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1983	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R1993	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R2601	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75Ω
R2602	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R2603	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75Ω
R2604	ERJ6GEYJ221	S.M.CARB	0.1W	5%	220Ω
R2605	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω
R2606	ERJ6GEYJ221	S.M.CARB	0.1W	5%	220Ω
R2607	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R2608	ERJ6GEYJ221	S.M.CARB	0.1W	5%	220Ω
R2609	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R2610	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R2612	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R2613	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R2616	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
R2617	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
R2619	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
R2620	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R2621	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R2622	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R2623	ERJ6GEYJ561	S.M.CARB	0.1W	5%	560Ω
R2624	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R2625	ERJ6GEYJ561	S.M.CARB	0.1W	5%	560Ω
R2626	ERJ6GEYJ332	S.M.CARB	0.1W	5%	3K3Ω
R2627	ERJ6GEYJ332	S.M.CARB	0.1W	5%	3K3Ω
R2628	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
R2631	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R2632	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
R2633	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
R2634	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R2636	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75Ω
R2637	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R2638	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75Ω
R2639	ERJ6GEYJ754	S.M.CARB	0.1W	5%	750KΩ
R2640	ERJ6GEYJ121	S.M.CARB	0.1W	5%	120Ω
R2641	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R2642	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47KΩ
R2643	ERJ6GEYJ333	S.M.CARB	0.1W	5%	33KΩ
R2644	ERJ6GEYJ152	S.M.CARB	0.1W	5%	1K5Ω
R2645	ERJ6GEYJ821	S.M.CARB	0.1W	5%	820Ω
R2646	ERJ6GEYJ821	S.M.CARB	0.1W	5%	820Ω
R2647	ERJ6GEYJ152	S.M.CARB	0.1W	5%	1K5Ω
R2648	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75Ω
R2651	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R2652	ERJ6GEYJ681	S.M.CARB	0.1W	5%	680Ω
R2653	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ

Ref No.	Part No.	Description				
R2654	ERJ6GEYJ681	S.M.CARB	0.1W	5%	680Ω	
R2655	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100KΩ	
R2656	ERJ6GEYJ221	S.M.CARB	0.1W	5%	220Ω	
R2658	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100KΩ	
R2659	ERJ6GEYJ221	S.M.CARB	0.1W	5%	220Ω	
R2660	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100KΩ	
R2662	ERJ6GEYJ152	S.M.CARB	0.1W	5%	1K5Ω	
R2664	ERJ6GEYJ335	S.M.CARB	0.1W	5%	3M3Ω	
R2665	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2Ω	
R2666	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω	
R2667	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2Ω	
R2668	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω	
R2669	ERJ6GEYJ271	S.M.CARB	0.1W	5%	270Ω	
R2670	ERJ6GEYJ511	S.M.CARB	0.1W	5%	510Ω	
R2671	ERJ6GEYJ272	S.M.CARB	0.1W	5%	2K7Ω	
R2672	ERJ6GEYJ822	S.M.CARB	0.1W	5%	8K2Ω	
R2673	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R2675	ERJ6GEYJ562	S.M.CARB	0.1W	5%	5K6Ω	
R2676	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R2677	ERJ6GEYJ681	S.M.CARB	0.1W	5%	680Ω	
R2680	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3101	ERJ6GEYJ562	S.M.CARB	0.1W	5%	5K6Ω	
R3102	ERJ6GEYJ562	S.M.CARB	0.1W	5%	5K6Ω	
R3103	ERJ6GEYJ562	S.M.CARB	0.1W	5%	5K6Ω	
R3104	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2Ω	
R3106	ERJ6GEYJ563	S.M.CARB	0.1W	5%	56KΩ	
R3107	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω	
R3108	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω	
R3109	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R3111	ERDS1FYJ222	CARBON	0.5W	5%	2K2Ω	⚠
R3112	ERJ6GEYJ152	S.M.CARB	0.1W	5%	1K5Ω	
R3113	ERD25TJ681	CARBON	0.25W	5%	680Ω	
R3121	ERJ6GEYJ153	S.M.CARB	0.1W	5%	15KΩ	
R3122	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2Ω	
R3123	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω	
R3124	ERJ6GEYJ681	S.M.CARB	0.1W	5%	680Ω	
R3127	ERQ14AJ100	METAL	0.25W	5%	10Ω	⚠
R3128	ERQ14AJ820	METAL	0.25W	5%	82Ω	⚠
R3129	ERQ14AJ820	METAL	0.25W	5%	82Ω	⚠
R3130	ERJ6GEYJ100	S.M.CARB	0.1W	5%	10Ω	
R3131	ERD25TJ563	CARBON	0.25W	5%	56KΩ	
R3132	ERD25TJ122	CARBON	0.25W	5%	1K2Ω	
R3133	ERD25TJ2R7	CARBON	0.25W	5%	2R7Ω	
R3134	ERDS1FVJ390	CARBON	0.5W	5%	39Ω	⚠
R3135	ERJ6GEYJ100	S.M.CARB	0.1W	5%	10Ω	
R3136	ERD25TJ563	CARBON	0.25W	5%	56KΩ	
R3137	ERD25TJ122	CARBON	0.25W	5%	1K2Ω	
R3138	ERD25TJ2R7	CARBON	0.25W	5%	2R7Ω	
R3139	ERDS1FVJ390	CARBON	0.5W	5%	39Ω	⚠
R3141	ERDS1FYJ101	CARBON	0.5W	5%	100Ω	⚠
R3142	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω	
R3143	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2Ω	
R3144	ERJ6GEYJ681	S.M.CARB	0.1W	5%	680Ω	
R3146	ERDS1FYJ181	CARBON	0.5W	5%	180Ω	⚠
R3152	ERQ12HJ102	METAL	0.5W	5%	1KΩ	⚠
R3153	ERQ14AJ3R9	FUSIBLE	0.25W	5%	3R9Ω	⚠
R3160	ERJ6GEYJ100	S.M.CARB	0.1W	5%	10Ω	
R3161	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3162	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3163	ERJ6GEYJ332	S.M.CARB	0.1W	5%	3K3Ω	
R3164	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω	
R3166	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω	
R3167	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω	
R3168	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3169	ERJ6GEYJ122	S.M.CARB	0.1W	5%	1K2Ω	
R3170	ERJ6GEYJ100	S.M.CARB	0.1W	5%	10Ω	
R3171	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3172	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3173	ERJ6GEYJ332	S.M.CARB	0.1W	5%	3K3Ω	
R3174	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω	
R3176	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω	
R3177	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω	

Ref No.	Part No.	Description				
R3178	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3179	ERJ6GEYJ122	S.M.CARB	0.1W	5%	1K2Ω	
R3180	ERJ6GEYJ100	S.M.CARB	0.1W	5%	10Ω	
R3181	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3182	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3183	ERJ6GEYJ332	S.M.CARB	0.1W	5%	3K3Ω	
R3184	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω	
R3186	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω	
R3187	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω	
R3188	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3189	ERJ6GEYJ122	S.M.CARB	0.1W	5%	1K2Ω	
R3307	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R3308	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R3309	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R3354	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47KΩ	
R3358	ERJ6GEYJ100	S.M.CARB	0.1W	5%	10Ω	
R3359	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω	
R3361	ERQ12HKR39	METAL	0.5W	5%	R39Ω	⚠
R3362	ERC12GK105D	SOLID	0.5W	10%	1MΩ	
R3364	ERC12GK821D	SOLID	0.5W	10%	820Ω	
R3365	ERD25TJ220	CARBON	0.25W	5%	22Ω	
R3366	ERQ12AJ101	FUSIBLE	0.5W	5%	100Ω	⚠
R3367	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3368	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R3369	ERJ6GEYJ682	S.M.CARB	0.1W	5%	6K8Ω	
R3370	ERJ6GEYJ100	S.M.CARB	0.1W	5%	10Ω	
R3371	ERJ6GEYJ272	S.M.CARB	0.1W	5%	2K7Ω	
R3372	ERJ6GEYJ332	S.M.CARB	0.1W	5%	3K3Ω	
R3373	ERJ6GEYJ152	S.M.CARB	0.1W	5%	1K5Ω	
R3374	ERDS1TJ913	CARBON	0.5W	5%	91KΩ	
R3375	ERG2ANJ183	METAL	2W	5%	18KΩ	
R3376	ERD25TJ561	CARBON	0.25W	5%	560Ω	
R3377	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω	
R3378	ERC12GK332V	SOLID	0.5W	10%	3K3Ω	
R3379	ERD25TJ103	CARBON	0.25W	5%	10KΩ	
R3380	ERJ6GEYJ100	S.M.CARB	0.1W	5%	10Ω	
R3381	ERJ6GEYJ272	S.M.CARB	0.1W	5%	2K7Ω	
R3382	ERJ6GEYJ332	S.M.CARB	0.1W	5%	3K3Ω	
R3383	ERJ6GEYJ152	S.M.CARB	0.1W	5%	1K5Ω	
R3384	ERDS1TJ913	CARBON	0.5W	5%	91KΩ	
R3385	ERG2ANJ183	METAL	2W	5%	18KΩ	
R3386	ERD25TJ561	CARBON	0.25W	5%	560Ω	
R3388	ERC12GK332V	SOLID	0.5W	10%	3K3Ω	
R3389	ERD25TJ103	CARBON	0.25W	5%	10KΩ	
R3390	ERJ6GEYJ100	S.M.CARB	0.1W	5%	10Ω	
R3391	ERJ6GEYJ272	S.M.CARB	0.1W	5%	2K7Ω	
R3392	ERJ6GEYJ332	S.M.CARB	0.1W	5%	3K3Ω	
R3393	ERJ6GEYJ152	S.M.CARB	0.1W	5%	1K5Ω	
R3394	ERDS1TJ913	CARBON	0.5W	5%	91KΩ	
R3395	ERG2ANJ183	METAL	2W	5%	18KΩ	
R3396	ERD25TJ561	CARBON	0.25W	5%	560Ω	
R3398	ERC12GK332V	SOLID	0.5W	10%	3K3Ω	
R3399	ERD25TJ103	CARBON	0.25W	5%	10KΩ	
R4701	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2Ω	
R4702	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R4703	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω	
R4705	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω	
R4707	ERJ6GEYJ683	S.M.CARB	0.1W	5%	68KΩ	
R4708	ERJ6GEYJ153	S.M.CARB	0.1W	5%	15KΩ	
R4709	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R4710	ERJ6GEYJ181	S.M.CARB	0.1W	5%	180Ω	
R4711	ERJ6GEYJ151	S.M.CARB	0.1W	5%	150Ω	
R4713	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2Ω	
R4714	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω	
R4715	ERJ6GEYJ821	S.M.CARB	0.1W	5%	820Ω	
R4716	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2Ω	
R4717	ERJ6GEYJ332	S.M.CARB	0.1W	5%	3K3Ω	
R4718	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R4719	ERJ6GEYJ123	S.M.CARB	0.1W	5%	12KΩ	
R4720	ERJ6GEYJ682	S.M.CARB	0.1W	5%	6K8Ω	
R4721	ERJ6GEYJ332	S.M.CARB	0.1W	5%	3K3Ω	
R4740	ERJ6GEYJ821	S.M.CARB	0.1W	5%	820Ω	

Ref No.	Part No.	Description			
R4743	ERJ6GEYJ682	S.M.CARB	0.1W	5%	6K8Ω
R4744	ERJ6GEYJ181	S.M.CARB	0.1W	5%	180Ω
R4745	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
R4746	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R4747	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
R4748	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
R4750	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47KΩ
R4751	ERJ6GEYJ563	S.M.CARB	0.1W	5%	56KΩ
R4752	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R4753	ERJ6GEYJ121	S.M.CARB	0.1W	5%	120Ω
R4754	ERJ6GEYJ271	S.M.CARB	0.1W	5%	270Ω
R4755	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R4756	ERJ6GEYJ332	S.M.CARB	0.1W	5%	3K3Ω
R4757	ERJ6GEYJ182	S.M.CARB	0.1W	5%	1K8Ω
R4758	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
R4759	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
R4760	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R4771	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
R4772	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
R6102	ERD25TJ151	CARBON	0.25W	5%	150Ω
R6106	ERD25TJ330	CARBON	0.25W	5%	33Ω
R6111	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R6112	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R6113	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R6114	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R6301	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R6302	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R6305	ERJ6GEY0R00	S.M:CARB	0.1W	5%	0Ω
R6401	ERD25TJ220	CARBON	0.25W	5%	22Ω
R6402	ERD25TJ220	CARBON	0.25W	5%	22Ω
R6403	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R6404	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
R6405	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
R6406	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R6407	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R6408	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
R6411	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47KΩ
R6412	ERJ6GEYJ273	S.M.CARB	0.1W	5%	27KΩ
R6413	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R6416	ERD25TJ101	CARBON	0.25W	5%	100Ω
R6417	ERD25TJ101	CARBON	0.25W	5%	100Ω
R6418	ERJ6GEYJ100	S.M.CARB	0.1W	5%	10Ω
R6433	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R6436	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R6437	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω

Ref No.	Part No.	Description			
R6438	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
R6441	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47KΩ
R6442	ERJ6GEYJ273	S.M.CARB	0.1W	5%	27KΩ
R6443	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R6446	ERD25TJ101	CARBON	0.25W	5%	100Ω
R6447	ERD25TJ101	CARBON	0.25W	5%	100Ω
R6448	ERJ6GEYJ100	S.M.CARB	0.1W	5%	10Ω
R6811	ERC12ZGK335D	SOLID	0.5W	10%	3M3Ω

SWITCHES

S6304	EVQ23405R	SWITCH	
S6305	EVQ23405R	SWITCH	
S6306	EVQ23405R	SWITCH	
S6307	EVQ23405R	SWITCH	
S6308	EVQ23405R	SWITCH	
S6811	ESB91232A	SWITCH	⚠

TRANSFORMERS

T528	ETH19Y173AY	TRANSFORMER
T531	ZTFH65005A	TRANSFORMER
T639	ETS39AH127AC	TRANSFORMER
T6101	ETP35KAN614U	TRANSFORMER

CONNECTORS

W1951	MKS165810808	CONNECTOR

FILTERS

X1321	4730007158	CRYSTAL
X1608	TSS2169-B	CRYSTAL
X1854	TSS4007-B	CRYSTAL
X2651	TAFCSB503F35	CRYSTAL
X2652	TSS4006-B	CRYSTAL
X4703	EFCV3095A6	CHIP FILTER
X4704	G3355K	SAW FILTER
X4706	EFCT5M7MW3	FILTER

DIFFERENCES FOR MODEL TX – 29AD3P

Ref No.	Part No.	Description	
MISCELLANEOUS COMPONENTS			
3)	TQF8E2545	MODEL LABEL	
4)	TKU8E00270	BACK COVER	⚠
5)	TNP117037BE	Y P.C.B.	⚠
6)	TLK8E05135	DEGAUSS COIL	⚠
7)	THT1009R	CRT FIXING SCREW	
8)	A68EHM69X23T	CRT	⚠
9)	TKY8E081	CABINET	⚠
12)	TBM8E1728	PANASONIC BADGE	
16)	TNP117034CF	A P.C.B	⚠
18)	TNP197087BU	E P.C.B.	⚠
23)	TKP8E1144	SPEAKER NET	
	TPC8E4636	OUTER CARTON	
	TPD8E617	CUSHION TOP	
	TPD8E618	CUSHION BOTTOM	
	TQB8E2413N-1	ROMANIAN INST BOOK	⚠
	TQB8E2413P-1	POLISH INST BOOK	⚠
	TQB8E2413Q-1	HUNGARIAN INST BOOK	⚠
	TQB8E2413R	CZECH INST BOOK	⚠
	TQB8E2413U	ENGLISH INST BOOK	⚠
	TQA8E2051	SCHEMATIC BROADSHEET	⚠
CAPACITORS			
C538	ECWF2H684J	FILM 500V 680nF	⚠
C541	ECWF2H684J	FILM 500V 680nF	⚠
C3101	ECUV1H030CCX	S.M.CAP 50V 30pF	
DIODES			
D564	MTZJ33B	DIODE	
INTEGRATED CIRCUITS			
I1941	X24C0701TB	EAROM	
RESISTOR			
R3126	ERJ6GEYJ182	S.M.CARB 0.1W 5% 1K8Ω	

DIFFERENCES FOR MODEL TX – 25AD2P

Ref No.	Part No.	Description	
MISCELLANEOUS COMPONENTS			
3)	TQF8E2544	MODEL LABEL	
4)	TKU8E00280	BACK COVER	⚠
5)	TNP117037AP	Y PCB.	⚠
6)	TLK8E05120	DEGAUSS COIL	⚠
7)	THE492-4	CRT FIXING SCREW	
8)	A59ESF002X11	CRT	⚠
9)	TKY8E100	CABINET	⚠
12)	TBM8E1726	PANASONIC BADGE	
16)	TNP117034CE	A P.C.B	⚠
18)	TNP197087AZ	E P.C.B.	⚠
23)	TKP8E1146	SPEAKER NET	
	TPC8E4531	OUTER CARTON	
	TPD8E619	CUSHION TOP	
	TPD8E626	CUSHION BOTTOM	
	TQB8E2411N	ROMANIAN INST BOOK	⚠
	TQB8E2411P	POLISH INST BOOK	⚠
	TQB8E2411Q	HUNGARIAN INST BOOK	⚠
	TQB8E2411R	CZECH INST BOOK	⚠
	TQB8E2411U	ENGLISH INST BOOK	⚠
	TQA8E2050	SCHEMATIC BROADSHEET	⚠
CAPACITORS			
C538	ECWF2H474J	FILM 500V 470nF	⚠
C541	ECWF2H105J	FILM 500V 1000nF	⚠
C3101	ECUV1H020CCX	S.M.CAP 50V 2pF	
INTEGRATED CIRCUITS			
I1941	X24C0701T	EAROM	
RESISTOR			
R3126	ERJ6GEYJ122	S.M.CARB 0.1W 5% 1K2Ω	

B BOARD ⚠
TNP117039

Z7
R4718 10k
R4740
R4717 3.3k
C4729 1000p
R4758 0
Q4702 BC847B
Q4703 BC847B
C4724 0.1
R4716 2.2k
R4715 820
C4730 1000p
R4714 470
C4722 0.1
C4723 0.1
R4720 6.8k
Q4701 BC847B
C4720 0.1
R4759 0
R4713 2.2k
R4711 150
Z10
Z1
L4707 10
R4744 180
X4706
R4707 68k
R4705 0
Z9
R4708 15k
C4718 1000p
L4706 EIV7EN201B
Z21
R4743 6.8k
R4756 3.3k
Z15
C4726 16V 47
R4721 3.3k
C4721 50V 2.2
C4719 50V 0.47
Z14
R4709 1k
R4710 180
Z2
C4733 27p
C4790 50V 1
C4717 0.068
SOUND OUT
VIDEO OUT
VCO
AFT OUTPUT
I4700
LA7577N
VIF IN
SIF IN
VCC
RF AGC
AFT
L4705 EIV7EN200B
C4705 0.1
C4706 0.1
R4703 4.7k
C4711 39p
C4712 15p
Z11
C4702 330p
C4703 50V 0.47
C4704 0.1
R4701 2.2k
P4701 5kB
R4702 1k
L4704 2.2
C4707 0.1
C4708 16V 10
R4746 10k
C4709 0.1
C4710 16V 10
Z13
X4704
Z12
C4745 1000p
R4771 0
R4750 47k
Q4704 BF370
R4751 56k
R4752 1k
R4755 100
R4757 1.8k
R4753 120
C4746 0.1
C4749 1000p
C4747 1000p
Q4705 BF370
R4754 270
C4748 1000p
Z5
Z6
AFT
R4772 0
Z3
X4703 EFCV3095A6
C4701 150p
L4701 0.47
R4748 0
R4747 0
R4745 0
Z4
C4742 10p
C4744 10p
R4760 100
+15V
Z17
Z8
Z24
C4725 0.1
R4719 12k
C4713 0.1
C4714 25V 10
I4701
AN78N12
IN
OUT
COMMON
C4716 16V 10
C4715 0.1
W4001
W252
IF
IF
AGC
VIDEO OUT
+5V
AFT
SCL
SDA
+15V
SIF

E BOARD
TNP197087

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* R542	ERG1ABJ151U	ERG1ABJ101U

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D491 MA167TA5
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D481 MA700TA
D680 9A157
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D527 EU02V0
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D201 22k
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D592 MTZJT-772 7B

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SDA
COMB C
SCL4
AV1 IN
AV2V IN
AV2C IN
AV3C IN
AV2C OUT
AV2V OUT
AV1V OUT
AV1C OUT
VIDEO
CHROMA
AV3V IN
I1011
TEA6420
SDA
SCL4
SAT L IN
AV3 L IN
AV1 L IN
AV2 L IN
TERR.L IN
AV2 L OUT
AV2 R OUT
L OUT
R OUT
SAT R IN
AV3 R IN
AV1 R IN
AV2 R IN
TERR.R IN
RCA ROUT
RCA LOUT
AV1 R OUT
AV1 L OUT
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AN78L08
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I1801
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AV1
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AV2/S
W1271
AV3/S
W211
W1201
W1241
W5401
HEADPHONE
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W1086
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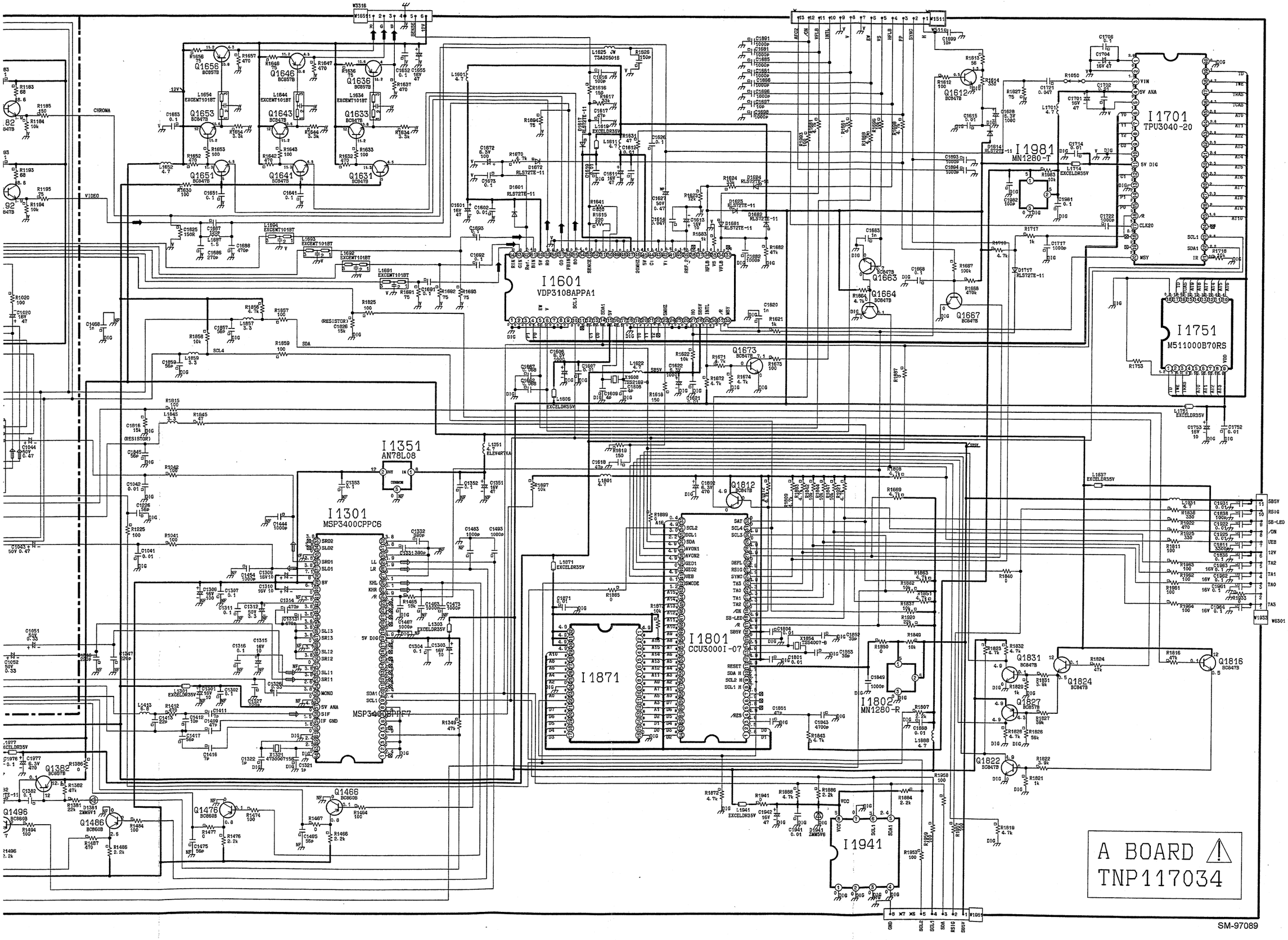
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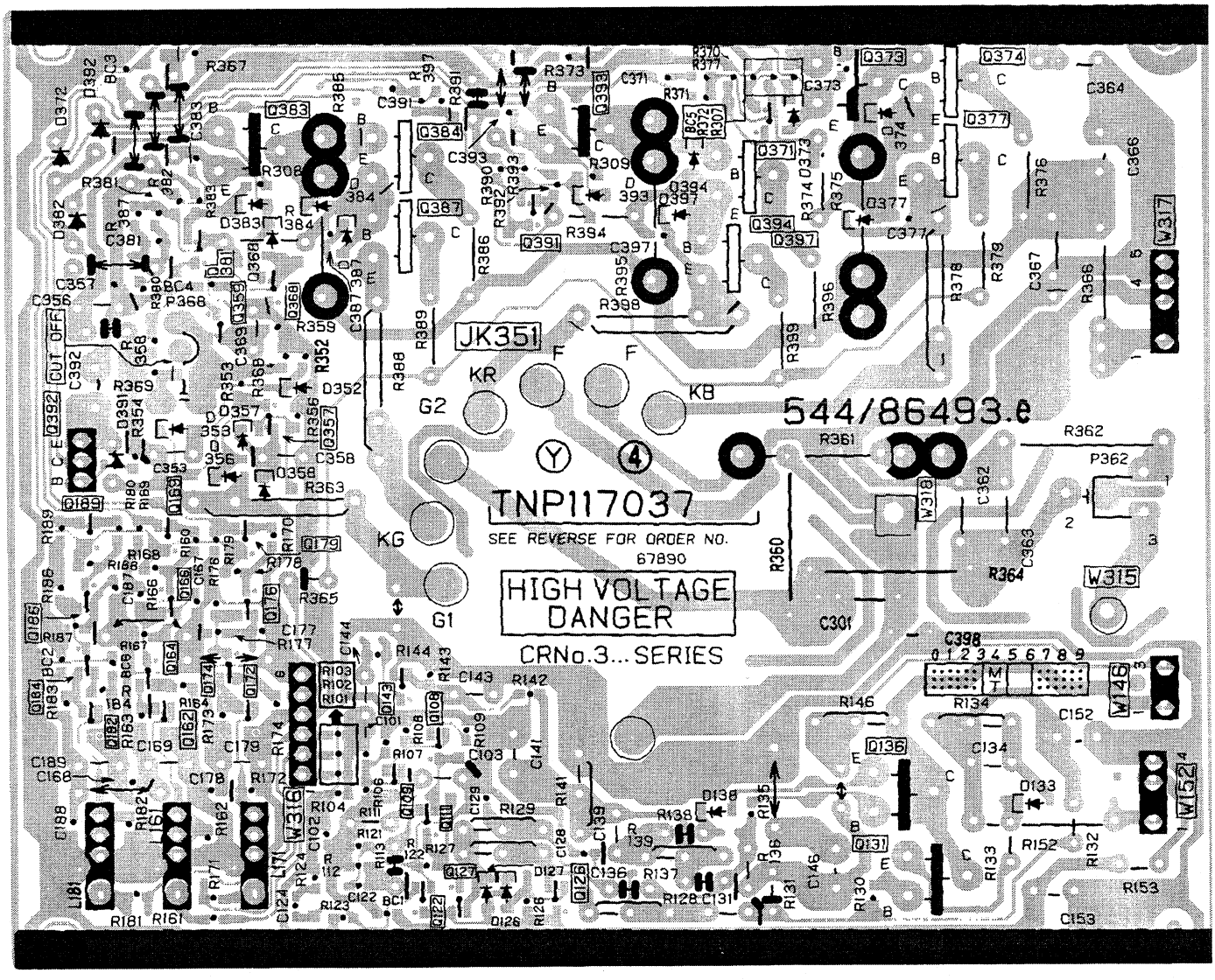
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KB
KG
G2
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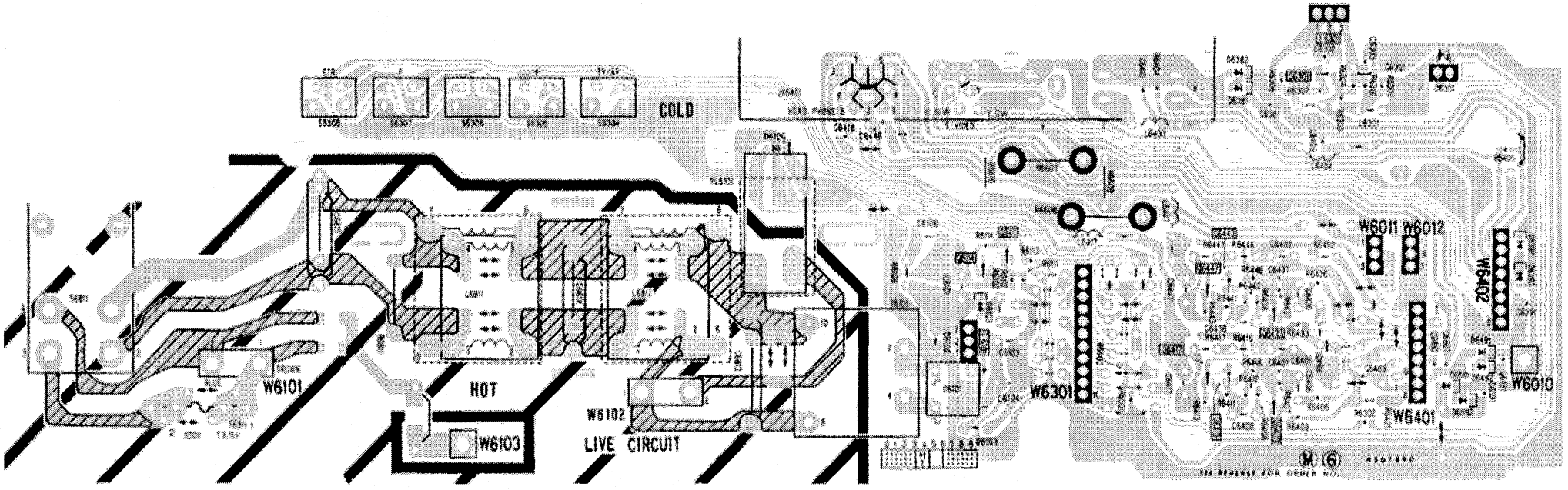
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HOT
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W6102
W6103
LIVE CIRCUIT
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W6012
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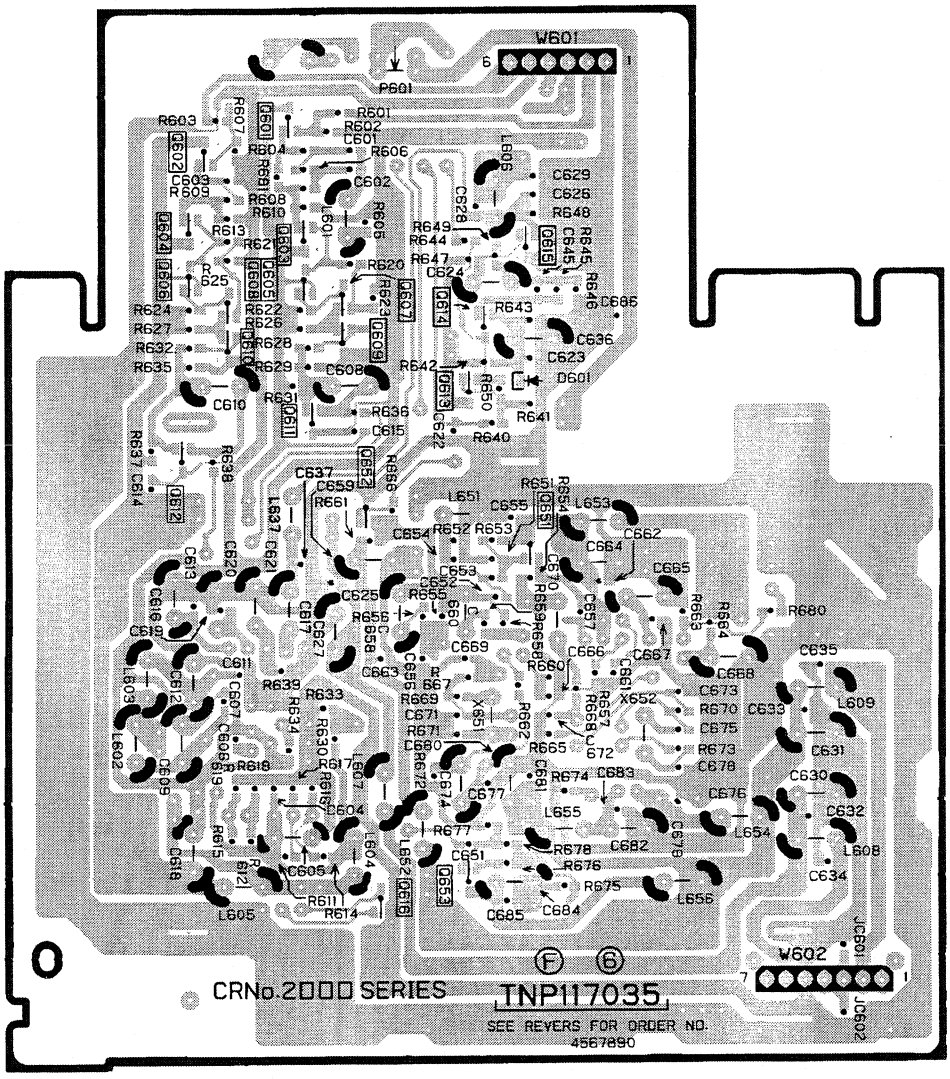
M 6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P601
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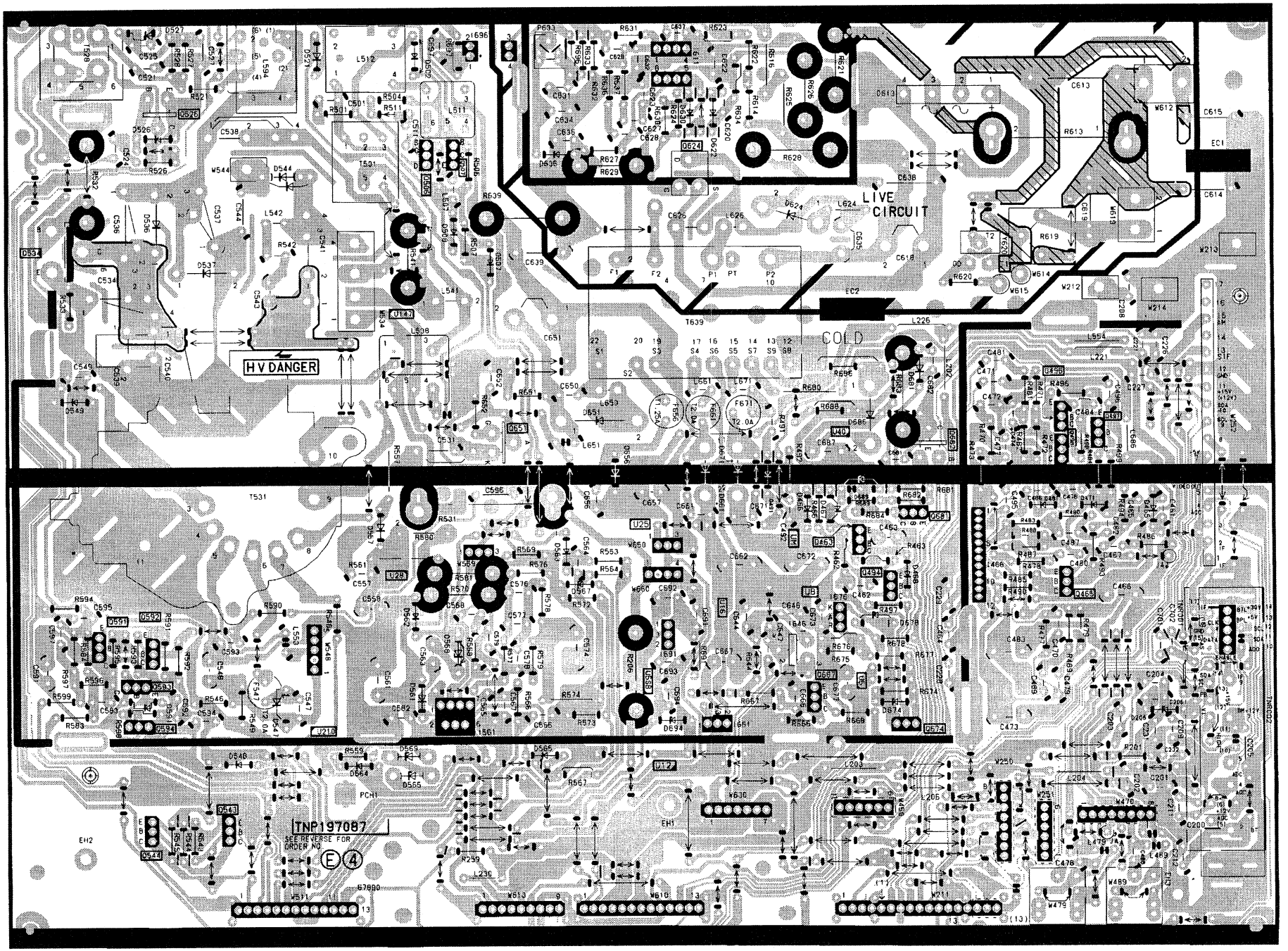
SEE REVERS FOR ORDER NO.
4567890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COLD
HV DANGER
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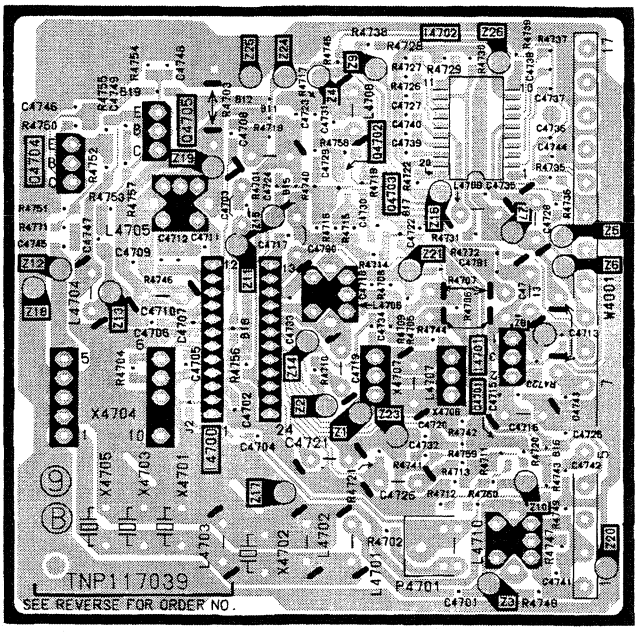
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X4702
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C4721
Q4705
Q4704
Q4703
Q4702
Q4701
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L4702
L4710
L4711
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L4707
L4706
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Z2
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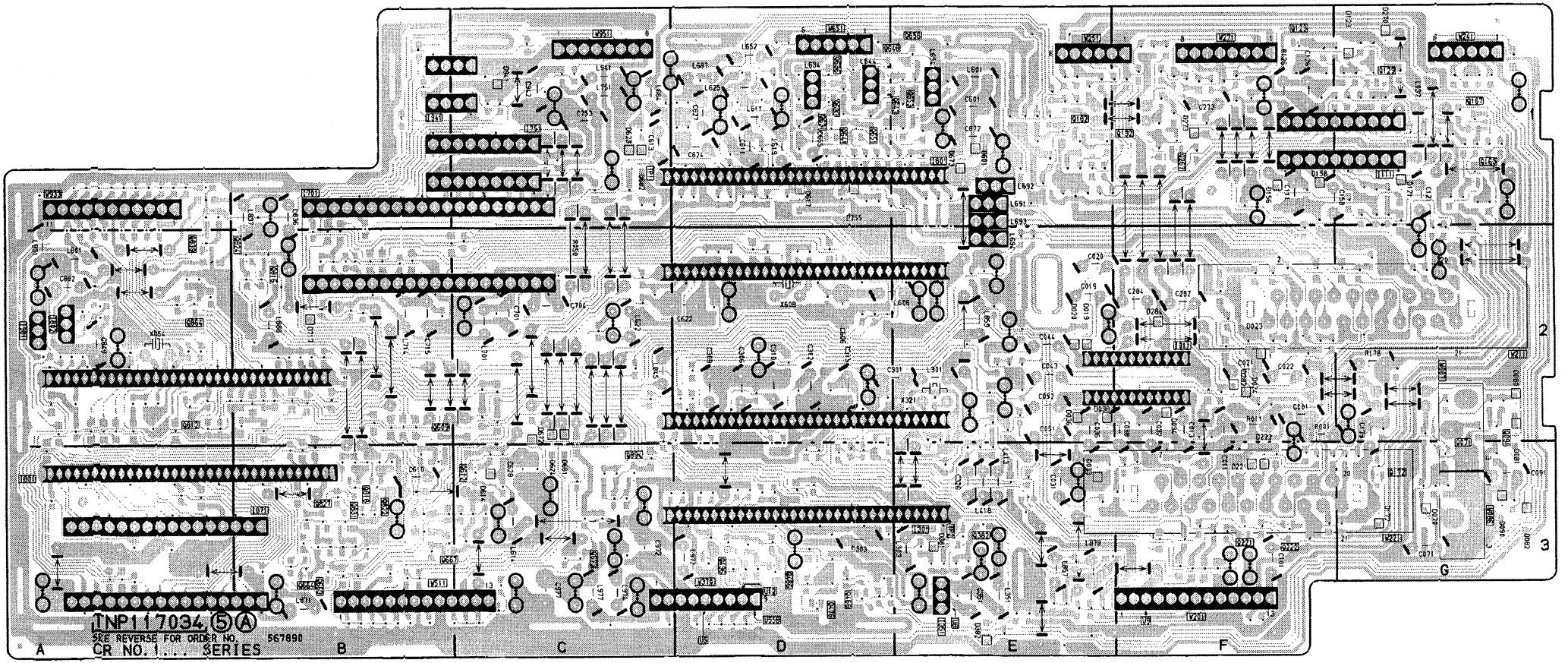
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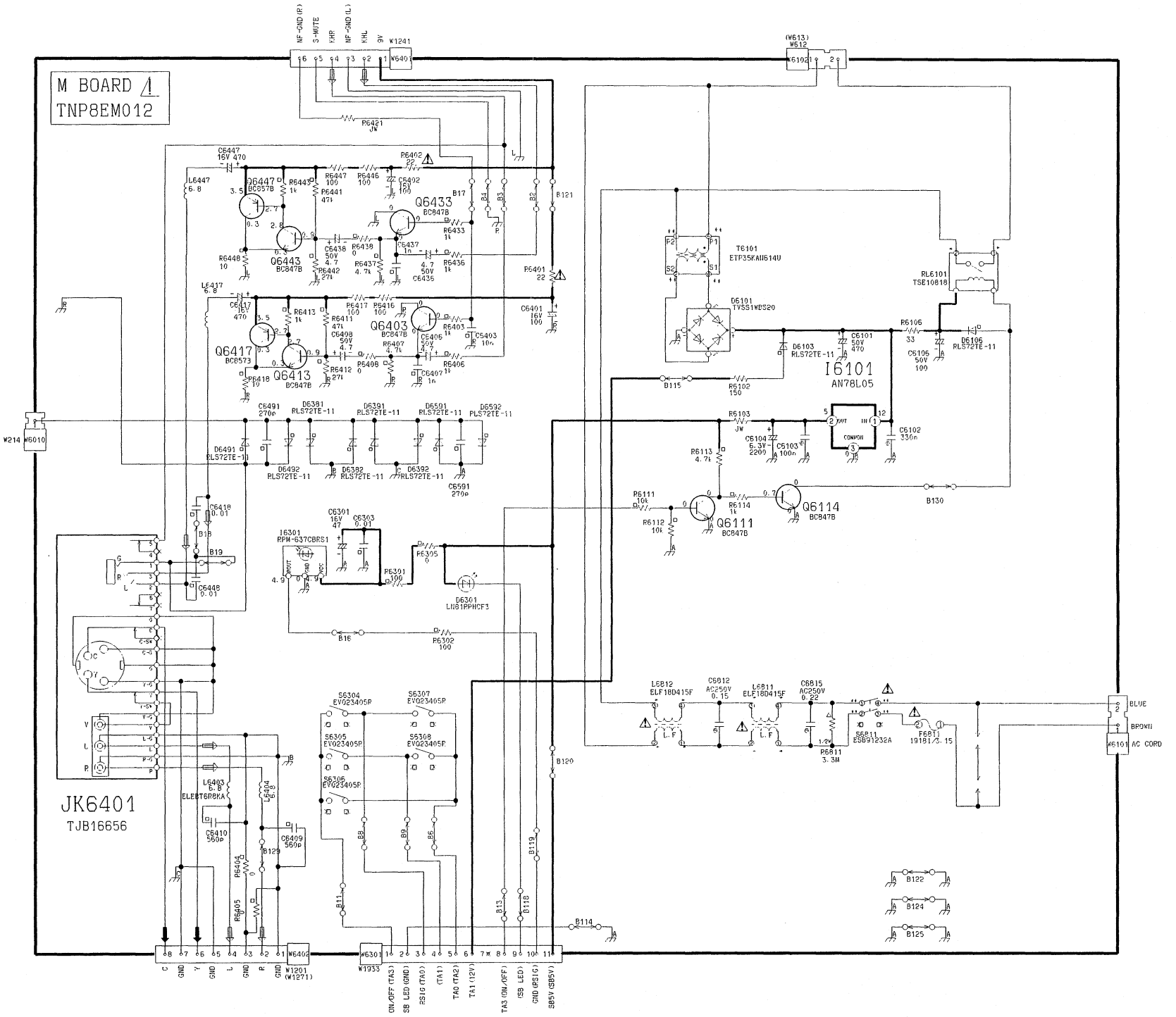
B
C
D
E
F
G
2
3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BC857B
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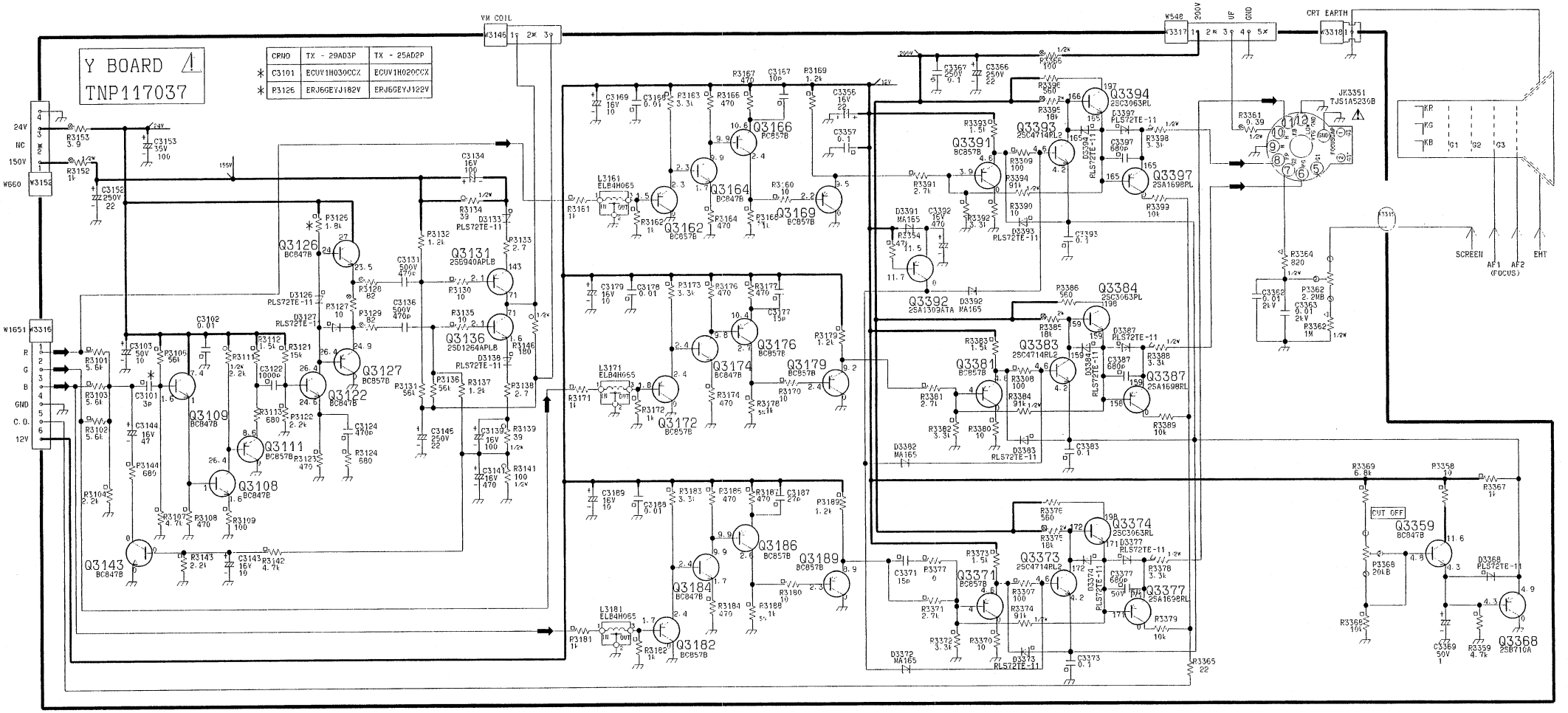
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CRT EARTH
200V
UF
GND
24V
NC
150V
W660
W3152
W1651
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R
G
B
GND
C.O.
12V
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TJS1A5239B
KP
KG
KB
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G2
G3
SCREEN
AF1
AF2
(FOCUS)
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